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RAILWAYS IN THE UNITED STATES

THEIR HISTORY, THEIR RELATION TO THE STATE, AND AN ANALYSIS OF THE LEGISLATION IN REGARD TO THEIR CONTROL

BY

SIMON STERNE

(1839-1901)

WITH SUPPLEMENTARY NOTES CONTINUING THE RECORD

TO 1911

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INTRODUCTION

SIMON STERNE was born in Philadelphia, July 23, 1839, and died in New York, September 22, 1901. In his professional career, which covered a period of about forty years, he secured a place in the first rank of the Bar of New York, while in connection with the conduct of cases before the Supreme Court in Washington, with arguments presented to legislative committees and to national commissions, and with a long series of papers and reports on subjects of national importance, he won, with the profession and with intelligent citizens generally throughout the entire country, authority for his opinions, conclusions, and recommendations, and distinction and cordial regard for his personality.

There came to him, in fact, as a result of certain of his scholarly and incisive reports on subjects of world-wide interest, a transatlantic reputation. Mr. Sterne's incisive and convincing method of presenting a case brought to him fame as a capable and successful advocate, while the thoroughness of his knowledge and the breadth and strength of his reasoning power placed him in the class of

great jurists. Mr. Sterne was, however, something more than an advocate and something larger than a jurist. His unselfish public spirit and distinctive service to the community in work for the solution of questions of the day and of the problems of his generation, entitled him to be described as a great citizen. Mr. Sterne found time, or he made time, after fulfilling, with a high standard of conscientiousness and a full measure of success, his obligations to his clients, for continuous labor in the arduous task of educating legislators and voters on a long series of puzzling and vital problems which from year to year called for the decision of legislators and for the judgment of voters. Among the public subjects which secured the advantage of his study and service may be mentioned the following: Organized labor and its relations to the community; party politics and the relation of the conscientious citizen to party organization; municipal reform (in connection with his interest in this subject, he rendered practical service as Secretary of the Committee of Seventy to the demolition of the Tweed ring); proportional representation; methods of legislation; corporations,—their responsibility and their relation to their shareholders, to their clients, and to the government.

In his study of corporations, Mr. Sterne gave special attention to the problems connected, on the one hand, with the management of railroads and with the relation of railroads to the shareholders, and, on the other, with the public and with the government as representing the public.

The present volume is made up of three papers contributed by Mr. Sterne on the subject of railroad management and of the relations of railways to the community. It covers the substance of certain reports prepared by him for commissions which were investigating the work of the railways. It is some years since these papers were brought into print, but the matters considered in them belong to a group of questions that are still awaiting solution. Excepting for the fact that the problem is larger to-day than it was when it was first taken up for consideration by Mr. Sterne, and that its vital interest for the community has been more clearly emphasized, the conditions differ very little from those that were in force at the time the conclusions and recommendations arrived at by Mr. Sterne were first brought before the public. The present volume belongs, therefore, to the history of the development and of the management of railways in the United States, and it can be made available to-day in helping to educate the legislators and voters of the present generation whose judgment is required for the solution of railway problems.

It is seldom that a man who is so excellently qualified by natural capacity, by training and by experience, to guide public thought in regard to such problems has been able or willing to give the large measure of time that was given by Mr. Sterne

to the investigation and the study required for a thorough grasp of these problems. The papers that he prepared in response to the requirements of his own contemporaries are too valuable to be put to one side, and the publishers are well pleased to have an opportunity, in printing the present volume for circulation on both sides of the Atlantic, to re-emphasize the continued value and the importance of the recommendations of this large-minded and large-hearted citizen.

G. H. P.

New York, Oct. 1, 1911.

PREFACE

An important division of the present volume is made up of an article on "Railways" contributed by Mr. Sterne to the Cyclopædia of Political Science, and included in this work under the courteous permission of the publishers, Charles E. Merrill & Co. This article, although written years before the enactment of the Interstate Commerce Law, contains information, suggestions, and recommendations which will still be found of importance in the consideration of the railway question. In reprinting the article, the editor has been able (by the use of additional material in brackets) to supplement certain of the statements, bringing the record down to the present date.

The volume includes, further, an address by Mr. Sterne delivered in 1895 before the Wharton School of the University of Pennsylvania, on the relation of the railroads to the State. At the date of the delivery of this address, the Interstate Commerce Act had been in operation for a series of years, and Mr. Sterne's conclusions as to the working of the Act, while having special interest for the students of the subject of that day, are still

valuable for the consideration of legislators and of voters. The problems touched upon in this address have still to secure a satisfactory solution.

The value of Mr. Sterne's writings on railway questions arises from his intimate relation with many of the matters treated of by him. He was instrumental in securing the passage of the Act establishing the Board of Railroad Commissioners in the State of New York, having appeared for many years before the legislature of that State in advocacy of that Act. He was counsel for the Chamber of Commerce and for the Board of Trade and Transportation, before the Assembly Committee on Railways of that State, appointed by the legislature in 1879 to investigate the abuses alleged to exist in the management of the railways of New York. The report of that Committee. usually described as the Hepburn report, is based entirely upon the testimony elicited by Mr. Sterne on behalf of the two commercial bodies just named. and is referred to in almost every treatise on the railway question since.

Mr. Sterne was frequently consulted in the preparation of the Interstate Commerce Act, and drafted some of its provisions. He had previously been asked to present his views to the Cullom United States Select Committee on Railways, which had been charged with the work of preparing a regulating act, and his address printed in their report throws much light on the railway situation of the time. Mr. Sterne was appointed by President Cleveland in 1887 to investigate and report on the relation of the Governments of Western Europe to the railways of those countries, and his report published as a government document is generally cited as authority.

For a sketch of his career the reader is referred to the *Life and Public Services of Simon Sterne*, by John Foord, published by Macmillan & Co., London, 1903. The following list of Mr. Sterne's writings relating to the railway question is taken from that work:

Argument for New York Cheap Transportation Association on Bill to Provide for Railway Commissioners and for Minority Representation in Boards of Directors of Railroad Companies. March, 1874.

Argument for New York Cheap Transportation Association on Bill to Provide for Railway Commissioners. March 28, 1876.

Argument before New York Assembly Committee on Railways on Bill to Create a Board of Railway Commissioners. March 28, 1877.

Speech before Assembly Committee on Railways to Organize a Board of Railway Commissioners. September, 1877.

Argument before Assembly Committee on Railroads on Bill to Create a Board of Railroad Commissioners. March 7, 1878.

The Railway in its Relation to Public and Private Interests. An Address before Merchants and

Business Men of New York, at Steinway Hall. April 19, 1878.

The Railway Problem in the State of New York. Opening Statement before Assembly Special Committee on Railroads, on behalf of the Chamber of Commerce and Board of Trade and Transportation of New York. June 12, 1879.

Railroad Poolings and Discriminations. Information in Answer to Questions Propounded by the Chief of the Bureau of Statistics, Treasury Department of the United States. June 27, 1879.

Closing Argument on behalf of the Chamber of Commerce and Board of Trade and Transportation of New York before the Special Assembly Committee on Railroads. December 2 and 3, 1879.

Address on Interstate Railroad Traffic, before the National Board of Trade. December 11, 1879.

The Corporation: its Benefits, its Evils; as Benefactor, as Monopolist. Lecture delivered before the General Society of Mechanics and Tradesmen. January 8, 1880.

The Railway Problem. National Quarterly Review, April, 1880.

Argument before U. S. Senate Committee on Commerce in relation to Bills referred to the Committee, proposing Congressional Regulation of Interstate Commerce. January 29, 1884.

The Railway Question: Statement to the United States Senate Select Committee on Interstate Commerce, at Fifth Avenue Hotel, New York City. May 21, 1885.

Report to President Cleveland on the Relations of the Governments of the Nations of Western Europe to the Railways. January 18, 1887.

Some Curious Phases of the Railway Question in Europe. A Paper read at a Meeting of the American Economic Association, at Boston, May 24, 1887. *Quarterly Journal of Economics*, July, 1887.

Railway Reorganization. *The Forum*, September, 1890.

Recent Railroad Failures and their Lessons. *The Forum*, August, 1891.

The Relation of the Railroads to the State. Paper read before the Wharton School, University of Pennsylvania, November 27, 1895.

M. S. S.

New York, Nov. 15, 1911.



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CHAPTER I

HISTORY AND POLITICAL ECONOMY OF RAILWAYS

IMPORTANCE OF THE RAILWAY

OF all the factors that have contributed, during this century, to the growth of wealth, to the increase of material comfort, and to the diffusion of information and knowledge, the railway plays the most prominent part. It has widened the field for the division of employments; it has cheapened production; it has promoted exchange, and has facilitated intercommunication. In its aggregate it represents a larger investment of capital than any other branch of human activity; and the service that it renders and has rendered to society is, both from industrial and commercial points of view, greater than is rendered by any other single service to which men devote their activities.

Down to a very recent period in his history, man was remitted to water routes mainly for the transportation of goods. Migration of hunters and shepherds could and did take place over land from zone to zone even without roads; but the transportation of heavy goods, such as form the bulk of the consumption of mankind, after the agricultural period had fairly set in, was necessarily committed to the waterways. The lands bordering rivers and shores were, therefore, the first to be populated by agricultural tribes, which, by establishing communication with other tribes by means of the waterways, started an exchange of products. Primitive commerce thus took its origin along the lines of rivers and the lagoons of coasts, occupied by tribes which were the forerunners of civilization in its developed form.

History gives us accounts of Assyrian and Persian roads that were at best not more than 200 miles in length, which were built for military purposes mainly. The Greeks made no contribution to the world's great highways, the roads to Olympia and Delphos comparing unfavorably with the roads subsequently built by the Romans. was the first nation that appreciated the advantages of highways; and its great conquests of Gaul, of Alemannia, and of Britain were due quite as much to the genius of the Romans for road-building as to their prowess and skill in arms. The road made the forest insecure to the barbarian. From the fight in the ambush the road compelled the fight in the open, and gave to the higher civilization an immense advantage over the more primitive arms and the absence of tactical knowledge of less civilized man. The road, therefore, was the means of

conquest of the Roman civilization over barbarism in the pre-Christian era.

In the shape of the railway, the road has become the principal lever in man's conquest over want, distress from the accidents of birth in locality, and the disadvantages arising therefrom. It has diffused civilization, and has distributed the commodities of any one part of the civilized world over every other part, so that wants and satisfactions become substantially equalized throughout the industrial world. Famine and great general distress become impossible; by means of the railway a large degree of well-being has, with but slight modifications, mainly due to man's mistaken legislation, been diffused all over the world.

The story of the mechanical means by which, in times within the memory of men of middle age, this great revolution was wrought, has been so often told that it seems almost superfluous to repeat it here; and yet the requirements of the title of this chapter make it necessary that it should be briefly recounted once more.

THE FIRST RAILWAYS IN ENGLAND

To England the world owes the railway. In the coal districts of the north of England, rails of wood were laid during the seventeenth century for the purpose of reducing the friction caused by pulling the coal cart from the workings to the mouth of the pit. About 1767 cast-iron rails were introduced.

Stone props, instead of timber, were used by Outram for supporting the ends of the rails; hence the term, still used in England, of tram roads. Between 1784 and 1820, Murdock, Trevethick, and Gray made experiments in steam engines. modern railway, however, both by common consent and as the verdict of engineering specialists, owes its origin, as a success in transportation, to George Stephenson, who built engine No. I for the Stockton & Darlington Railway, which was originally organized as a horse railroad, but which was authorized in 1823 to use steam as a motive force. Stephenson himself acted as the engineer on the opening of the steam railroad line in the autumn of the year 1825. Following this, came the opening of the Manchester & Liverpool Railway in 1830, the first engine of which was also built by Stephenson, and which from the outset not only proved the success of the railway in the transporting of persons and goods, but also showed it to be a financial success to its promoters and stockholders in their investment of capital. Within the first year after the opening of the Manchester & Liverpool line, upward of 500,000 passengers were carried.

OPPOSITION TO THE RAILWAY

That the railway was not introduced without much opposition would go almost without saying. The large interest in the stage-coaches had either

to be conciliated, bought off, or fought. The canal proprietors, who had just gotten well under way with their canal projects, and were making considerable sums of money out of them when this formidable rival appeared upon the field, were opposed to the competition of the railway. In the third place, the rich landed proprietor regarded the railway as a devouring monster, which would not only destroy the value of his fields, but which threatened to destroy his game preserves and his beautiful lawns and flower beds, and, with but few exceptions, the rich landed proprietor opposed the railway. But stronger than all these special interests in opposition to the railway, was the conservative spirit of the English people, which found expression in the British Quarterly Review, in the words: "We should as soon expect the people of Woolwich to suffer themselves to be fired off upon one of Congreve's ricochet rockets, as to trust themselves to the mercy of such a machine going at such a rate."

DEVELOPMENT OF THE ENGLISH RAILWAY

London was first connected by rail with the interior of England in 1833, when the through line to Birmingham was completed. From that time forth English railways rapidly developed, so that at the close of 1881 the railway system of the United Kingdom consisted of 18,180 miles in a country of 120,000 square miles in area; representing a total

capitalization of £746,000,000, and carrying annually 623,000,000 passengers, with yearly receipts of £64,000,000. [In 1908, the mileage was 23,205, capitalization £1,310,533,212, passengers carried, 1,278,115,488, and annual receipts £119,894,327. See Statesman's Year Book for 1910, p. 81.]

THE EARLY RAILWAYS IN THE UNITED STATES.

The success of the Stockton & Darlington experiment produced in the United States a greater effect than it did in England. Before the Liverpool & Manchester line was built, in 1830, many lines of rail were already projected in the United States, and as early as 1825 what is now the New York Central system was begun to be built under the charter of the Mohawk & Hudson Railroad. 1827, Massachusetts authorized the appointment of a board of commissioners, and caused surveys to be made of the most practicable routes for a railroad from Boston to the Hudson River at or near Albany. Two reports were made by these commissioners in the winter of 1829, giving a survey of the road, accompanied with the recommendation to make the commencement of the railroad on both the routes at the charge of the commonwealth. In 1830 and 1831 the Boston & Worcester Railroad and the Boston & Providence Railroad companies were chartered, and in 1832 work was already under way to connect Boston with New York. Pennsylvania started its railway system in 1827.

and Maryland and South Carolina in 1828. The Baltimore & Ohio railroad system was commenced in 1828. In 1830, almost simultaneously with the opening of the first railroad line in England, railways were being opened in the United States in every direction. The growth of the railway system in the United States is best indicated by the facts, that in 1828 there were three miles of railway; in 1830, forty-one miles; in 1840, 2200; in 1850, 7500; in 1860, 29,000; in 1870, 49,000; in 1880, 93,671; and at the close of 1881, 104,813 miles. In 1882 the increase was about 13,000 miles, making a grand total mileage in the United States at the beginning of the year 1883 of about 115,000 miles of rail. [In 1909 the total mileage, according to Poor's Manual for 1910, was 236,378 miles.]

The capital account at the close of 1881 shows a total of \$6,815,000,000. Adding, for 1882, \$40,000 a mile for about 13,000 miles, increases the total capitalization \$520,000,000, making a grand total of about \$7,335,000,000. [In 1909 the total capitalization, according to Poor's Manual for 1910, was \$17,942,282,575.] The gross earnings of the railways of the United States in 1881 amounted to \$725,000,000, \$552,000,000 of which was from freight earnings, and \$173,000,000 from passengers; resulting in the payment of a dividend, over and above fixed charges, of \$93,344,200 interest on the bonds absorbed, of net earnings of \$276,654,119, the sum total of \$128,587,302, in addition to what went into other sources. In 1881 the tonnage

transported was not less than 315,000,000 tons. [In 1909, the gross earnings were \$3,418,677,538, \$1,677,614,678 being from passengers, and about \$1,740,000,000 from other sources. The freight tonnage transported was 1,556,559,741 tons. See Statistics of the Railways in the United States, for 1909, pp. 59, 72, 74.]

THE RAILWAY IN FRANCE

France was much slower than England and America in adopting the railway system. dependent of the fact that the Latin race is not so alert in adopting labor-saving contrivances as the Anglo-Saxon, there was a cause for the slower adoption of the railway in that country, as it was better supplied with highways than England, and transportation charges in the early half of this century were comparatively much cheaper in France than in England. With the exception of some few small lines, there was no development of the railway system in France until about 1842, when nine great lines were established, which subsequently were amalgamated into six. These at the present day [in 1883, and still in 1908] divide and occupy between them substantially the whole French territory. Besides these, however, there are a few state lines and branch roads of insignificant importance. The names of these six great lines are Chemin de fer du Nord, de l'Ouest, de l'Ést, d'Orléans, Paris-LyonsMéditerranée and du-Midi. The extension of the railway system in France has not been so great as it has been in England or the United States, owing to circumstances which will be referred to later. [The length of French lines open for traffic in 1908 was 25,060 miles of line of general interest, and 4968 miles of local interest. The concessions granted to the six great companies expire at various dates from 1950 to 1960; the periods of state guarantee of four of these terminate at the end of 1914, and of the others in 1934 and 1935. See Statesman's Year Book for 1910, p. 776.]

BELGIUM RAILWAYS

The railway system of Belgium is 2000 miles in extent, in a country embracing an area of II,373 square miles. Two thirds of the whole of the railway mileage in Belgium is composed of lines worked by the state, and one third by private companies. [In 1908, the mileage was 2913 miles, 2530 of which were worked by the state. See Statesman's Year Book for 1910.]

NETHERLANDS

In the Netherlands, with an area of 13,000 square miles, there are 1230 miles of road, of which the state owns 630 miles, and private companies 600. [In 1908, the mileage was 1908 miles. See *Statesman's Year Book* for 1900, which

adds that all railway companies are private, and that there is a state railway company, only so called because the road is owned by the state.]

GERMANY, AUSTRIA, AND RUSSIA

Germany, Austria, and Russia were somewhat behind the western nations of Europe in their railway development, but within the decade before 1880 an enormous extension in their development took place, for the purpose of competing with France for the eastern trade, as well as for the purpose of military operations of an offensive and defensive character. In the Franco-Prussian War the seizure and management of the railroads by the state, for the purpose of aiding strategical movements, formed so important an element in the military operations of Prussia against France, that throughout central Europe a large number of lines have since been built, to secure strategical advantages.

RAILWAY MILEAGE

The following table, taken from Spofford's American Almanac for 1883, gives the statistics of the railways of the world to Jan. 1, 1881. [This is supplemented by a table of mileage for 1909, collated in Appleton's American Year Book for 1910, and for 1908 in the Statesman's Year Book for 1910:

	Miles.		Miles.
I. North America. United States (1883) Canada Mexico Total North America	117,717 7,894 2,293 127,830	[In 1909 "" "	240,839 24,731 15,293 280,863
2. Middle America. Costa Rica Cuba (Spanish) Honduras Jamaica (British) Nicaragua Trinidad Total Middle America	105 858 56 25 34 16	In 1909 " " " " " " " "	405 2,300 100 184 171 16 3,176
3. South America. Argentine Republic. Bolivia Brazil Chili Columbia (U. S. of) Equador Guiana (British) Paraguay Peru Uruguay Venezuela Total South America.	1,619 31 1,899 1,193 99 75 21 44 2,030 235 70	In 1909 " " " " " " " " " " " " " " " " " " "	16,033 500 12,209 2,244 510 316 95 1,550 1,540 540 35,642
4. Europe. Austria-Hungary Belgium Denmark France Germany Great Britain and Ireland Carried forward	11,738 2,597 978 17,027 21,565 18,168 72,073	In 1908	25,852 2,913 2,141 29,716 36,686 23,205 120,513

	Miles.		Miles.
Brought forward	72,073		120,513
Greece	7	In 1908	771
Italy	5,410		10,388
Netherlands	1,227	" "	1,912
Norway	946	** **	1,607
Portugal	1,039	" "	1,690
Roumania	916	44 44	1,995
Russia	14,067	" "	41,136
Spain	3,849	** **	9,227
Sweden	3,836	" "	8,321
Switzerland	1,636	" "	2,763
Turkey	889	" "	1,239
Total Europe	105,895		201,562
5. Asia.			
•		T	
Ceylon (British)	136	In 1907	566
China	- 0	1900	3,746
India (British)	9,872	1900	30,576
Japan	96	" 1907	4,898
Java (Dutch)	3,498		1,536
Philippines (Spanish)	279	1908	292
Turkey in Asia	250	" 1909	2,836
Total Asia	14,131		44,450
6. Africa.			
Algeria (French)	804	In 1908	2,000
Cape Colony (British),		46 66	
now Cape of Good Hope	905		3,757
Egypt	942		3,503
Mauritius	66	44 44	119
Namaqualand	95		
Natal (British)	101		978
Tunis	155	46 66	664
Total Africa	3,068		11,021

	Miles.		Miles.
7. Australia.			
New South Wales	1,183	In 1908	3,472
New Zealand	1,258	44 44	2,763
Queensland	801		3,559
South Australia	832		1,879
Tasmania	178		463
Victoria	1,247	44 44	3,396
Western Australia	93	16 14	1,943
	5,592		17,475
Grand Total	264,826		594,189]

THE CAPITALIZATION OF RAILWAYS

In England, by reason of the high price of land which the railways must occupy and acquire, and a rigid application of the rule requiring the railway corporation to pay for consequential and indirect damages, its railways represent the maximum of capitalization. Taking this extreme of capitalization of the English railways, of \$200,000 a mile, as a maximum, and the capitalization of the cheapest American railways, of \$25,000 a mile, including equipment, as a minimum capitalization. it is fair to say that the average capitalization of railways the world over is not less than \$50,000 per mile. Upon that basis the 264,000 miles of railway in the world would represent a total valuation, in the way of capital invested in these vehicles and means of intercommunication, of \$13,200,000,000. [Poor's Manual for 1910 gives the total stock bond and capitalization of the 236,378 miles of railways of the United States as \$17,942,282,575, or at the rate of \$75,905 per mile. The States-

man's Year Book for 1910 gives the mileage of railways of Great Britain and Ireland at the end of 1908 as 23,205, with a capitalization of £1,310,533,212, or at the rate of \$273,000 per mile.]

Compared with all the debts of all the nations of the earth, amounting, in round numbers, to \$27,000,000,000, it appears that, within the period of the last fifty years [before 1880], the industrial world has invested a capital in means of intercommunication alone, of about one half the sum that has been raised by way of loans for the purpose of carrying on, during the last few hundred years, all the wars, and constructing all the internal improvements, of all the nations of the earth. [According to the World's Almanac for 1909 and 1911, the world's national debts in 1909 totalled \$36,548,455,489, and in 1911 over \$39,000,000,000. The total mileage of railways in 1908 was 572,550, and the total capitalization in 1908 was estimated at \$46,000,000,000, or largely in excess of the total debts of the world.]

THE GOOD AND EVIL SIDE OF RAILWAY GROWTH

So great a manifestation of a social power, representing, as it does, a growth unprecedentedly rapid, must and does exhibit many peculiar phases of social and politico-economic problems, and must bring with it evils incident to its own existence which demand some form of intelligent treatment and cure. It would, indeed, be remarkable and

without parallel, that any human instrumentality, however beneficial, could grow to such enormous proportions without having some shadow side in the way of defects, evils, and even crimes attendant upon and concomitant to the immense good it brings forth. The first effect of the development of the railway system on the intercommunication of men, has been to give a great impetus to the transmission of intelligence and personal intercourse. One need but read the letters of Madame de Sévigné to see what an arduous task it was to travel during the middle of the seventeenth century. When she proposed to set out to visit her daughter, 200 miles distant, she prepared her will, and set about the journey with a solemnity of mind somewhat akin to that felt by a person at the present time who is about to investigate the sources of the Nile, or make a voyage to the North Pole. But one need not go back so far for examples of the dangers, both anticipated and real, that down to within this century beset the traveller. The Newgate calendar is part of the history of the stage-coach, almost to the very time when railways were introduced. Highwaymen scoured the country round, within a radius of ten miles from London. Hounslow Heath, Black Heath, Epping Forest, Clapham Commons, all embraced post routes, and were the scenes of the exploits of many a man who, within this century, came to his end at Tyburn and at Newgate. The time occupied in moving from great centres to the capital is indicated by an advertisement of the York and London stage coach in 1706, in which the advertisers promise to be in London on the fifth day out from York, and to run from London to York in four days.

It is said by Francis, in his *History of the English Railway*, that the abdication of James II. was not heard of in the Orkneys until three months after his flight. He says:

"In the seventeenth century the charge for conveyance amounted, in many instances, to a prohibition. Heavy goods cost, from London to Birmingham, £7 a ton; from London to Exeter, £12 were paid. Coal was rarely seen, save in the neighborhood of the district which produced it. Pack-horses, strong, enduring animals, the breed of which is now extinct, were employed to carry the produce of the weaver's patient skill, the pottery of Staffordshire, and even the coals of Newcastle, laboring along heavy roads, toiling beneath a burning sun, wending their way through bare, bleak moors, down steep descents, by dangerous rivers, on narrow tongues of land, between masses of mire and mud so deep as to be dangerous if they entered—a leading horse bearing bells to intimate the approach of the party he heralded. The group formed a most picturesque accompaniment to the wild, weird scenes it enlivened. . . . The private carriage, if such, indeed, should chance to approach, left the track at the risk of never returning to it, while more numerous parties either

resisted the cavalcade, or moved, like the solitary passenger, out of the way, as their weakness or strength might indicate. With such difficulties before them, few persons left their homes but those who were called by some most special reason."

Macaulay says that the inhabitants of London, in the seventeenth century, were farther removed from Edinburgh than they are now from Vienna; and, indeed, it might be said, farther removed from Edinburgh than they are now from St. Petersburgh or New York. The reason why, to this very day, Parliament sits in summer, is because the roads in England were so bad, and the difficulty and danger of getting to the capital so great, that it was impossible in the midwinter months to convene a Parliament with any expectation of having the members attend from the north, from the extreme west of the kingdom, from Scotland, or from Ireland.

INFLUENCE OF TRANSPORTATION ON COST OF COMMODITIES

In the early part of the nineteenth century the difficulty of moving bulky articles was somewhat overcome by MacAdam's invention for improving highways, and by the introduction of canals. Part of the politico-economic results in the way of cheapening and distributing products was already under way by the creation of artificial waterways, which were introduced into England, France, and Spain in imitation of the Netherlands.

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In fixing the price for the sale of every commodity, the element of cost of transportation must be considered, with but the very slight exception of articles that are consumed on the spot where created, like the food raised by the farmer for his own family. As the great bulk of commodities consumed in this world is transported from one point to another, it is obvious at once how important is the rôle that transportation plays in the work of production as well as of consumption. Indeed, transportation is a factor which enters into both the consumption and production of commodities as largely as money does into their exchange, and it plays even a more important rôle than money does in determining their price.

The certainty, diminished cost, and rapidity with which commodities could be transported from place to place by the introduction of the railway, not only increased the exchangeability of commodities, but also made it possible to forward to distant places, theretofore unsupplied with such commodities, products which formerly were consumed only at the spot where created, and the increased facility of transportation created values which could not have existed at all but for such improved methods of transportation. A familiar illustration of this fact is the great industry which had been created in Brittany and Normandy in producing eggs and butter for the London market, and even vegetables for Edinburgh's daily consumption. Before the existence of the railway, the rich dairies of Normandy could give to Normandy alone the enjoyment of fine butter, and there was no possibility for the Londoner or the Scotchman to enjoy a French egg or a pat of French butter at his breakfast table without going personally to France. For 600 or 1000 miles the railway now carries the Frenchman's dairy and farmyard products as easily as to the neighboring town. The prices of those commodities have gone up in France, because a market has been found for them.

But, what is of greater importance, their enjoyment is possible to a greater number of people. Waste, that great destroyer of human effort, is eliminated, and unsatisfied wants in the particulars above mentioned can no longer exist. Through the instrumentality of the railway, the law of competition gets its widest possible extension, restrained and hampered only by limitations put by human law, in the way of tariffs, on the full enjoyment of the results of such competition. With the extension of the lines of commerce, within which a given commodity can find its market, comes an increased demand, which not only again reacts to produce an increased supply, but equalizes prices, so that the element of chance is eliminated as much as possible from human affairs. French history gives us the fact, that during a period of 300 years, there were about 100 years of famine in one or another part of France, while contemporaneously absolute abundance prevailed in other districts. Such a condition of things,

even long before the railway, has not only become impossible for France by the development of means of intercommunication, but is now made impossible the world over by reason of the railway. connected with rapid steam communication by That periods of famine and distress arise in India, in an abnormally situated community living upon one vegetable product alone, and prevented by superstition from varying their food, does not diminish the force of the fact that such things are impossible in any community which has emerged from a semi-barbaric condition. Also, in India, the periods of distress are rapidly diminishing, and are becoming considerably less in intensity when they occur. An exaggerated picture of the evils incident to the present civilization is given by the colors in which the sensational modern press paints the distress and crimes of the day; and the inquisitorial and searching character of the correspondence produces a vividness which makes the superficial observer imagine that both crime and suffering have increased, whereas, in point of fact, they are constantly decreasing. What has increased is the power and opportunity for observation and giving detailed results of such observation to the public eye and ear.

That the several results of the introduction of the railway have become a common heritage of the great mass of mankind, and that its introduction benefits the laborer more than it does the millionaire, is indicated by the fact that the cost of

transportation, which bears a greater and greater relation to commodities which are bulky and coarse and of general consumption, and forms a less and less ratio or element of expense in commodities which are easy of transportation, and not bulky in form, has been considerably lessened by the railway. Even during the Middle Ages the laces of Mechlin and of Brussels, and the tapestries of the Netherlands and of France, could be transported the world over. At the courts of Europe specimens of the art handicraft of the then known world could be found. Gems, laces, and velvet could be transported on horseback without difficulty; but no food or clothes produced for common use or wear could be brought from a distance, the cost of transportation, added to the original cost of the article, increasing the price to such an extent as to make it beyond the means of the common man. Hence the individual born to a particular spot of earth, became the inheritor of all the evils and all the disadvantages incident to that spot. What the average man could not there produce, was not for him to enjoy. What his neighbor could not produce for him, he could not obtain in exchange for his own products. The cost of transportation served as an impassable barrier to placing himself in more comfortable condition, either by removal to lands more favorably situated as a market for his labor, or by bringing within his reach such more favorable condition in the shape of the importation of commodities.

But even in India, the famine of 1873-4 was counteracted, the distress overcome, and the consequences removed, with a rapidity never before known in Indian history. Theretofore, the distress occasioned by a famine ordinarily lasted upward of ten years. In the following year (1875), when the actual season of dearth ended in India, and some favorable results in the way of weather and crops were produced, the consequences of the famine were quite removed. Neumann is authority for the statement that in consequence of the development of the railway system, upward of 21,000,000 hundredweight of rice was distributed within eleven months by the English Government during the prevalence of the famine. Even in the decade 1860-70, before the railway system was developed in India, several years of dearth and of famine occurred in the same district, and it is estimated that from two and a half to three and a half million people died during that period. The drought and failure of crops in 1873 and 1874 were greater than before, and authentic accounts show us that there were not at the utmost more than 20,000 persons whose death can be attributed directly to insufficient food. The accessibility of the newspaper correspondent, by means of the railway, enabled the world at large more thoroughly to realize the distress that occurred during 1873 and 1874, but the actual death-rate, as compared with that from 1860 to 1870, from famine, was not one per cent.

As the difficulty of transportation is an element

of cost in the exchange of commodities, a saving in the cost of transportation, producing an increased market, results also in the additional effect that the capital which otherwise would be expended upon transportation is available for other purposes. It is true that the medium of transportation is in itself a costly contrivance, and that it has swollen, as we have seen, to \$13,000,000,000 for railway purposes alone; but as the great majority of these enterprises pay a return to those who have invested their moneys, the capital is productively employed, profitably expended, and constantly being reproduced by the return. The railway, therefore, in its general effects upon mankind and the investors, has been a blessing.

PRODUCTION INCREASED BY RAILWAYS

The general result of railway construction has been an enormous increase of production and productive power on the part of mankind, and has also resulted in an enormous development in the character of productions, particularly in the direction of producing, for general and popular consumption, commodities which, until the railway was introduced, were in many cases impossible of transportation, except along the lines of waterway.

One of the most interesting illustrations of the condition of life before the railway is given by the philosophical agriculturist, Von Thünen, and quoted by Sax, in which, assuming as a central

point a city, he places around it, within a radius of fifty miles, an agricultural district, composed of six zones, for products which the farmer may raise with profit for the consumption of the city. In the first zone, lying closest to the city, he places the production of garden vegetables, fruit, and milk; in the second zone he places the production of commodities which cost more to transport, such as potatoes, carrots, etc. In the third zone the production of wood is placed. In the next three zones, in certain proportions entered into too minutely for citation here, cereal productions and animals are put.

The vast benefit conferred by freedom to cultivate land with alternate crops and with whatever suits the land best, has become possible only by the increase of means of transportation. Doubtless the rules laid down by Von Thünen were practically adopted in consequence of difficulties of transportation, which, once wiped out, now not only make the farm fifty miles remote as profitable and valuable as the one close to the city, but enable the latter in compensation to produce whatever the land is best fitted to produce, instead of simply that which proximity to the market compels. In other words, the natural advantages of production have, by the wiping out of the element of transportation, or rather, reducing it to a minimum, been permitted to come into full play. The producer was conditioned, by proximity to or remoteness from the market, as to the proper use of

his instrument, the soil. He now produces that which his soil is best capable of producing: all the markets have become near, by the railway. better illustration can be found of this than in the development of the fresh fruit industry of the world within recent times. With the exception of those that ripen on the stem when detached from the tree, as oranges and bananas, but a very few years ago the consumption of fruit other than at the place where it was grown was almost impossible. To-day, however, the fruit of California can, in lusciousness and perfection, be better found on the tables of the inhabitants of New York and London than in San Francisco. Thus the trade in products which require to be consumed fresh has, by the increase of means of communication introduced by the railway, been added to the commerce of the world; and a vast addition to the world's wealth has been made by the exchange ability of natural products which either would not have been produced at all, or which, being produced in excess of the local demand, would have rotted upon their stems or upon the ground.

A like addition has been made to the commerce of the world in the power of transporting cereals and bulky productions, such as grain, iron, wood, etc. The time is not far behind us when the locomotives of Illinois burned corn for fuel, in consequence of the high price of fuel, and the low price of corn; and the high price of the one and the low price of the other arose from the insufficient

means of transportation of both to the localities where they could best be used.

The diminishing of the cost and the increasing of the facilities for transportation, introduced by the railway, have likewise substantially added to the world's mineral products. In parts of this country where the railway has not yet penetrated, it does not pay to open mines of silver-bearing ore yielding less than sixty dollars to the ton. The moment that a railway is opened to the point, bringing fuel thither and taking away either ore or base metal, the mine that was valueless before becomes a valuable property if it yields forty or even twenty dollars per ton, and thus its treasury is added to the world's wealth.

The rapidity of transportation has another effect. It diminishes the risk of capital, and increases its fertility, by securing a speedy return for money invested; and inasmuch as the return of the capital comes back more speedily, it lessens the rates of profits, thereby securing lower prices to the consumer. The effect which the production of our Kansas, Nebraska, and Dakota wheat-fields has had upon the English farmers is a result, only on a wider field, analogous to that which has been had on the narrower field of Von Thünen's concentric lines.

The influence of the railway upon manufacturing industries has been almost as great as it has been upon agriculture. In ante-railway days the furnace and the smelting works were of necessity

compelled to be close to the ore. It may now be situated close to where the capital, which contributes to establishing the works, is located. Although such industries suffer somewhat from the higher price of labor incident to the denser centres of population, yet the better supervision and more intelligent workmanship that is contributed to the manufacturing process by reason of the capitalist being able personally to superintend the operations of his factory, and thus reduce waste, enable such works by the securing of a larger application of capital to find compensation, and even profit, notwithstanding their distance from the mine.

We therefore find the great manufacturing industries, though being at some distance from the actual output of raw material, gradually establishing themselves in the large cities, which are the centres of capital. Denver, in Colorado, is rapidly becoming the centre of the smelting operations of the State, for ores bearing precious metals. St. Louis is an important ore-reducing point, and successful reductions of precious ore are carried on in Philadelphia and in the city of New York, thousands of miles away from where the raw material is obtained. Equally true as to textile fabrics is this condition of things. Whether in the shape of wool coming from the Cape of Good Hope. cotton from India, South America, or from our own cotton States, hemp from the Far West or from Hungary, the raw products are all used up at the

same manufacturing establishment, at Manchester or at Paisley, at Cohoes or at Lowell, and but for the tariff the cost of distribution of the raw material would form but a small item compared with the advantages obtained from water-power, proximity to ships and to coal, and, more especially, facilities for the obtaining and the supervision of the capital employed. By delocalizing the working up of the raw material into its finished product, and giving to capital the advantage of immediate personal supervision, a tendency has been produced which has been a puzzle to many economists—the centralization of industrial employment, and the driving of the smaller handicraftsmen from successful competition by compelling them to become a part of vast industrial establishments. The controlling of millions of dollars of capital gives to such capital great advantage over the individual more favorably located as to territory, but less favorably located in the employment of the more expensive labor-saving machinery, and facilities for carrying on large enterprises at the lowest possible rates of interest.

The result of this tendency is not an unmixed good. It causes cities to become overcrowded; it takes away the independence of the individual working man; it makes the handicraftsman part of a huge machine, and compels the workman to give his time more and more to smaller and smaller parts of the whole operation necessary to produce a given result. The smith of the Middle

Ages would produce an armor, and would even ornament it with devices. He would also shoe horses. To work in iron and steel in all its departments was his occupation, and he was probably a larger man in his development than the smith of to-day. But society is called upon to pay a penalty for the enormous counter-advantages of the division of employments in the decreased development of the workman. The division of employments, of course, increases considerably the output of each working man, and as the sum total of output is thus enormously increased, the sum total of exchangeable products is enormously increased. A given amount of labor will, at the present period produce to the smith of to-day an exchange of products many times greater than could be obtained by the smith in the Middle Ages, notwithstanding the superior general skill and workmanship of the latter.

ADVANTAGES OF RAILWAYS

Friedrich List, in urging upon Germany in 1841, the necessity for developing the railway system sums up in the following order the advantages to be derived from its development.

1. As a means of national defence, it facilitates the concentration, distribution, and direction of the army.

2. It is a means to the improvement of the culture of the nation, as it facilitates the distribution and promotes the ra-

pidity of distribution of all literary products, and the results of the arts and sciences. It brings talent, knowledge, and skill of every kind readily to market, and increases the means of education and instruction of each individual and of each class and age. 3. It secures the community against dearth and famine, and against excessive fluctuation in the prices of the necessaries of life. 4. motes the hygienic condition of the community, as it destroys distances between the sufferer and his means of cure. 5. It promotes social intercourse, and brings friend to friend, and relative to relative. 6. It promotes the spirit of the nation. as it has a tendency to destroy the Philistine spirit arising from isolation and provincial prejudice and vanity. It binds nations by ligaments, and promotes an interchange of food and of commodities, thus making it feel to be a unit. The iron rails become a nerve system, which, on the one hand, strengthens public opinion, and, on the other hand, strengthens the power of the state for police and governmental purposes.

SPECULATION PROMOTED BY RAILWAY BUILDING

One of the first pathological symptoms that this great, beneficent growth has produced was the speculative spirit that it promoted and fed. The era of speculation, however, does not begin with the development of the railway. Great speculative manias, destructive in their consequences,

and of as far-reaching and disastrous results, form part of the history of trade and commerce of the past two hundred years. The Mississippi bubble, under Law, the tulip mania in Amsterdam, and the South Sea bubble in England, were eras of as wild speculation as the railway mania in England, and were much more disastrous in their consequences. When the shares of Law's bank declined, and the South Sea bubble burst, all money values represented in those elements of speculation were destroyed beyond repair. Wild as was the railway speculation of 1844 and 1845 in England, and culminating as it did in a great financial crisis in the winter of 1845 and 1846, the railway, the subject-matter of the speculation, still remained; and although shares were frightfully depressed during the crisis, they ultimately rose to something approaching their true value, the excessive premiums paid by individuals being all that was Every country which has allowed the wasted. railway to be built by private enterprise has had its share of speculative ventures and speculative prices. Railway building has certainly fostered a class of unscrupulous operators as well as tricky and reckless railway officials, who found larger profits in the share market, and more rapid means of achieving great fortunes, than in finding capital for railway construction, or honestly and efficiently administering the railway properties and trusts in their hands. Absence of governmental supervision as to stock capital of railways has caused the placing on the money markets of the world of a vast quantity of fictitious values, not representing actual construction in money value, but possible value to result from the development of traffic and anticipated dividends. [The governmental supervision since introduced has restricted this tendency considerably.]

In many instances the seemingly excessive profits made in the United States by railway building were but a fair and natural return for the great risks incurred. In the event of success. the men who had the foresight and boldness to invest their capital in building lines like the Transcontinental Pacific through the territory of hostile tribes of Indians, across plains and over deserts, at the risk of life and fortune, deserved considerable remuneration for their boldness and their enterprise. Differences of opinion may honestly be entertained whether they have not been overpaid, and whether the methods adopted through the instrumentality of political chicanery were in the least justifiable. These matters apart, however, it must be conceded that, but for the inducement held out of very large profits through the instrumentality of fictitious capitalization and subsidies of land or money, many of the newer territories of the United States would have been unsupplied by railways.

FICTITIOUS CAPITALIZATION

What is here said is not meant to be a justifica-

tion for fictitious capitalization, which is an evil of such great and wide-bearing consequence that it were better if railway building were somewhat delayed than to allow it to come into existence under such conditions. The writer desires simply to draw attention to the fact, that the absence of governmental supervision over capitalization leaves individuals or corporations free to devise whatever scheme they may think best to enhance profits in conducting doubtful enterprises, and results inevitably in railway management regarding no interest except that of the promoters and capitalists who respectively lay out the scheme and find the money, and in such a case the public will be wofully left out of sight. At the very outset of railway development, Stephenson, who was, from all we can learn of his career, as wise a statesman as he was an engineer, insisted that railways should be taken in hand and operated by the government, claiming that, from its nature and character, it was a highway which would in time become more important than the ordinary road, and which also possessed the peculiarity that the owner of the road would, in time, do the business of transportation thereon. In terse language he expressed, before a committee of Parliament, his opinion that competition would not be the means of producing in this case, as it does in others, the cheapest and best results for the community, because, said he, "where combination is possible, competition is excluded."

RAILWAY DEVELOPMENT AND FREEDOM OF MANAGEMENT

Railway development took its origin in England and in this country contemporaneously with the growth of the democratic spirit, and with the dissemination of politico-economic ideas. democratic spirit was jealous of governmental power, and aimed at its reduction and decentralization. The politico-economic doctrines taught, as an axiomatic truth, that the government performed its operations at greater expense than the individual, and that whatever could be left to individual enterprise should be excluded from the domain of government. Political economy at the same time asserted, as an axiomatic truth, the proposition that competition was productive of unmixed good; that it was universally applicable; that governmental regulation and interference tended to diminish or destroy competition; and that it would subserve the best interests of mankind if government would let things in commercial and industrial enterprise work out their own salvation.

In England and America, therefore, railways were placed in the hands of corporations, which had power, on paying its value, to condemn property. In England, maximum rates of charges were in every case prescribed by the charter constituting the corporation, but these maximum charges were generally made so high that they practically did

not interfere with the railway corporations; within the limitation of these maximum charges the railways were free to make such discriminations or modifications as they deemed necessary to meet particular exigencies. For every addition to its public powers and for every extension of its line, the railway was compelled to go to Parliament for powers. The opposition of the landowner and canal proprietor once overcome, however, the great benefits conferred from the very outset by the establishment of railway communication became so apparent that Parliament was but too willing to grant additional powers without inquiring very closely as to what use would be made of them.

EARLY MISTAKES OF LEGISLATION

Both in England and America the legislatures of the period from 1825 to 1835 made the mistake of supposing that the railway bore an analogy to the canal, and traces of this mistake appear in almost all of the early charters. It was supposed that, like the canal, the railway would be built by one class of capitalists, but that also, in the same manner as over the canals, the traffic over the railway would be carried on by another class of individuals or corporations, of forwarders and common carriers, who, under regulations and charges for toll established by the railroad company, would do the transportation business over

the line. It was supposed that the railway was merely an improved highway, the carriages of which would run within certain grooves from which they could not depart, and that in all other respects the railway corporations would be one function and the business of transportation over it would be in the hands of others. Thus, the charter of the Ithaca & Owego Railroad contains the following language: "Sec. 12. All persons paying the toll aforesaid may, with suitable and proper carriages, use and travel upon the said railroad, subject to such rules and regulations as the said corporators are authorized to make by the 9th section of this act."—(Laws of N. Y., 1827, p. 17.)

USELESSNESS OF FIXING MAXIMUM RATES FORESEEN

Certain members of Parliament foresaw that, as a means of protection of the public, the limitation upon excessive profits imposed in these undertakings by fixing a maximum rate of charges was insufficient. Pre-eminent among those members of Parliament was Mr. James Morrison, who, in a speech delivered in the House of Commons May 17, 1836, said:

"The limitation of the rates of charge is, in a progressive country, good for little or nothing. The increase of population and trade has been so very great that a toll that would have yielded an ample profit on a railway constructed a dozen or

twenty years ago, might now perhaps yield an equal amount of profit were the rates reduced a half. Nothing in fact can be more improvident or more absurd than that Parliament should once for all fix the rate of toll when an undertaking is entered upon, and divest itself, unless by violating the right of property, of the power to reduce that rate in all time to come, how greatly soever it may exceed what would be a liberal return for the capital invested in the undertaking. I need not add that it is of the greatest importance to the interests of the public that the cost of internal communication should be reduced as low as possible. The limitation of the dividend is a practice found to be as ineffectual as the fixing a maximum on the rate of charge. The public has no check on the system of management, nor can it explore the thousand channels in which profits may be distributed, under other names, among the subscribers, nor has it any means of preventing the wanton and extravagant outlay of money on the works, etc. To make the provision for limiting the dividends good for anything, it would be necessary that all the proceedings of a company so limited should be controlled by commissioners appointed by the government."

He therefore insisted that in every case a clause should be inserted in parliamentary concessions to railway corporations, by which Parliament reserves to itself the right to revise the rates of toll every decade, or oftener. Mr. Morrison also deprecated the idea that competition would prevent excessive charges, and even at that early day he foresaw that a vast amount of capital would be expended unnecessarily in making duplicate lines, whereby the public would not be benefited by the securing of lower rates of charges, but the existing traffic would be divided in combination by the new lines and the prior existing lines, even though the roadbed of the latter was by no means taxed to its maximum capacity in caring for the traffic on the line. He urged upon Parliament the necessity of preventing such a waste of capital, claiming that by a reckless chartering of new lines competition was not secured, and that the new lines when built would by combination with existing lines prevent the public from securing the benefits to be derived from the chartering of the new lines.

In a speech delivered in 1845, nine years later, Mr. Morrison, after showing the gradual reduction in the cost of and charge for transportation, and the enormous benefits which the railway system had conferred upon England, as well as the great social changes which were taking place in consequence of the existence of the railway system, continued:

"These various circumstances prove that the question now is no longer one of private consideration, but one of great public policy, a matter not to be left to the control of inferior boards or private companies, but one which ought to be subject to the interference of Parliament, and

guided by the wisdom of the government. A great social change is in the act of taking place, and it is to this great subject that I invite the attention of the house, of the government, and more particularly of the right honorable baronet (Sir Robert Peel) at the head of the administration, and I entreat him to look at this question as one great whole, and not to regard it in detached, isolated details and fragments. If he will view it in all its many and important ramifications, if he will estimate the combined effects of all sorts that are certain to follow from this extraordinary combination of influences, he will, I think, agree with me in believing the subject to be one of the greatest moment, one fraught with unspeakable benefits if properly directed, but, if neglected or mismanaged, threatening us with evils of portentous magnitude."

He then entered upon the question of tolls. He said:

"I may here be asked the principle upon which I would regard the rates of toll. My answer is, that I would determine the rate of toll in every case by the sum at which the particular line of railway could now be constructed. The public are not bound to inquire what the line really has cost, but merely to ascertain the sum for which it could at the present time be constructed, and the railway proprietors ought to be compelled to carry the public and their goods for such fare as would yield a fair profit upon such outlay."

"So little, indeed," he concludes, "was the subject of railways understood in its commencement that the original rates were fixed upon the supposition that the railway proprietor would be the proprietor of the road only, and that the persons using it would pay merely for the means of transit, as upon the canals. It is well known that such has not been the case. Railway proprietors are almost universally not only the owners of the line, but the carriers upon it. Still, strange as it will seem, the legislatures have continued, in every railway bill down to the last bill of the last session, to repeat these lists of tolls, although in no single instance, I believe, has it been found practicable to carry them into effect. These rates of tolls are practically a mere delusion. In truth, Parliament might just as well have ordered the several companies to exhibit in their stations a set of old sheet almanacs. They were a mere useless incumbrance."

These were the utterances of a member of Parliament of extraordinary intelligence, of a man who had worked his way up from a clerkship to the position of being the richest merchant in England, where he occupied a position somewhat akin to that held at a subsequent day by A. T. Stewart in the United States. To him England, and indeed the commercial world, owes the system of charging in retail transactions one uniform and undeviating price, without cheapening or bargain, a system which has since his time been adopted as

the sound commercial rule in England, in America, and in the leading cities of France and of Germany.

EARLY UNITED STATES RAILWAY CHARTERS

In this country, a few of the early charters, copied somewhat from the English parliamentary acts, contained maximum rates of toll in a schedule of rates. In some of these early charters the state reserved the right to purchase within twenty years the railway thereby authorized to be constructed. No general act then existed indiscriminately granting the right of way and the right to condemn property to any persons who saw fit to organize a railway corporation, but in every instance an application had to be made to the respective legislatures for the various powers to be exercised by the corporation. Some little safeguard was therefore left in the hands of government against too great an abuse of public power.

In 1846, owing to the spread of the politicoeconomic doctrines before referred to, and to the corruption incident to the railway lobby in the legislative halls, the new constitution of the State of New York required its legislature to pass general laws under which corporations may be formed (Art. VIII., § 1), and, acting in the spirit of this requirement, the legislature of 1848 passed a general railroad act, substantially like the one re-enacted in 1850, except that the legislature, by the act of 1848, reserved, in each particular case,

the power to grant by special act the right of eminent domain, and to give to corporations about to build and operate railways a means only, under the general law, of organization and of power. In 1850 that safeguard was surrendered by the passage of a general railway act omitting such reservation. Thereafter twenty-five persons could, by the mere filing of articles of incorporation in the office of the Secretary of State, become a railway corporation, endowed with power to take property in invitum, and to run lines wherever and in whatever form they saw fit, subject only to certain restrictions as to rights in cities, and to condemn property for such purposes. This placed railway corporations upon the footing of any private enterprise in the hands of corporate management, and, except as to passenger traffic, was a complete surrender of every attempt on the part of the government to supervise, regulate, or control the railway corporations of the State, or to subject them to any conditions securing, without discrimination and injustice, fair and proper rates to the public. This general railway law did away with the railway lobby; and the immediate benefits in the way of extensions of the railway systems, and the freedom from public corruption resulting from this railroad law, caused other States to follow in the wake of the State of New York, and State after State passed general railway acts in imitation or modification of the one enacted by the State of New York in 1850. This introduced

the era of what was supposed to be competition, with results which we shall presently examine in detail.

RAILWAY CONSTRUCTION AND CONTROL IN EUROPE

Now let us look at the course that the railway question took in other countries.

Belgium. In Belgium all concessions for constructing railways are granted by the Minister of the Interior, subject to the ratification of the Chamber of Deputies and of the King. The expectant corporators deposit a plan, giving the line of the route, estimates of its revenue, and the probable expense of the undertaking, together with a tariff of tolls for passengers and freight traffic, at which they propose to carry. The project is then submitted to the Department of Roads and Bridges, or to a special commission of engineers for report. All inquiries to verify the calculations and the statements of the projectors are made at the expense of those who deposit the plan, and for that purpose they are required from time to time to pay in to the ministry such sums as they may be called upon to contribute. Then for a period of from one to three months the whole plan is advertised in the locality to be affected by it. The local councils of the municipalities through which the road is proposed to be laid consider the project, and report to the ministry. After these reports

have been presented, a hearing is had, either before the commission on bridges and roads, or before the minister himself, at which the engineering work, the guarantees for its execution, the objections to its being undertaken, etc., are discussed, and the manner in which the government is to exercise surveillance over it is fixed. The rate of charges by the company, the time for which they may be demanded, and the time within which the work is to be commenced and finished, are also specified. After all these questions have been settled, the whole matter is then submitted to the Chamber and Senate and the King, either of whom can alter it before it passes as a law.

In Belgium, the government itself, however, built the principal lines, or bought them up, and it now in theory allows private companies only to build extensions and developments of the main lines. In 1850, of the lines of railway in Belgium, 64 per cent. of the whole were owned by the government, and 36 per cent. by private individuals. After the construction of its main lines. however, the Belgium Government retired from the work of constructing new lines, and in consequence there was, in 1860, 67 per cent. of the mileage in Belgium in the hands of private individuals, and only 33 per cent. in the hands of the state. By amalgamation, however, these small feeders in the hands of private individuals in process of time have developed into trunk lines, competing with the government lines on their own

field. [The Statesman's Year Book for 1910 gives the mileage of lines worked by the state at the end of 1907 as 2530 miles and by private companies 330 miles.]

The Grand Central Belge, a private company, was formed out of seven companies, and the Société Générale d'Exploitation, another private line, was formed out of nineteen companies. So long as the government owns, controls, and works its main lines of railway, and keeps down the interest upon the outlay to 7 per cent., no dangerous combination, however, is to be feared. It may at any time, if any line becomes very profitable, buy it up, as, under the terms of every concession, a railway line in Belgium is subject to purchase by the state for the benefit of the commonwealth. The purchase price is the net receipts of the last seven preceding years of the company's working, from which the receipts of two most profitable years are deducted, and an annuity, equivalent to the average dividend of the five remaining years, with the addition of 15 per cent., is paid for the road.

One of the peculiarities of the Belgian system is that the government guarantees to the line it allows to be built interest at the rate of 4 per cent. on its actual outlay; it thus has full justification for supervising the construction of the railway, and insisting upon the fullest possible reports, prescribing the method of its book-keeping, designating some of its officers, and generally regarding

the railway corporation as wards of the state. This method of guarantee also prevents the undertaking of lines which do not promise to be fairly remunerative from the start. The rates of charge of both the passenger and freight traffic of all the railways of Belgium are fixed in the concessions themselves, which are limited to ninety years. The rates are, of course, maximum rates, the companies being at liberty to reduce their rates to any point below the figures set forth in the law. But when the state has guaranteed the 4 per cent. of the capital, the consent of the Minister of Public Works is, however, necessary, before the tariff is permitted to be lowered. A very active competition was carried on in past years between the railways owned by the state, and the railways owned by individuals, wherever the lines touched the same points. This competition has resulted in the corporate railways being permitted to make special contracts in the same manner as the state railways did down to about 1864, when a law was passed forbidding the making of special contracts; and compelling both the state railways and the individual railways to carry all their freight at schedule rates.

By this system of state guarantee of investment, the state is prevented from carrying its competition with the private lines beyond a certain point. The fact that the private companies must be permitted to earn a net revenue of 4 per cent. upon the capital invested therein, or the state must make good the deficiency, serves as a check upon the competition of the state.

This system resulted in giving to Belgium the best, and in every way the most efficient, network of railway service on the face of the globe. It had low rates of passenger traffic, and low and certain rates of freight traffic. The private companies were earning good dividends upon their capital. The state, on the one hand, prevented the private companies from becoming a dangerous monopoly; and, on the other hand, the constant competition with private enterprise compelled the state to manage its own property with frugality and intelligence, to be able to sustain the competition with private enterprise. The state reserves to itself the regulation at all times of the number of trains to be run upon the private roads; their connections with other railways, and the amount of the terminal charges, are likewise under state control. Before any contract between two different companies can be acted upon finally by the companies themselves, it must be submitted to the Department of Public Works and the Department of Roads and Bridges, and receive their approval.

In every concession, clauses are introduced, requiring the companies to take the cars of other companies at certain rates, and to furnish the motive power for them to some point upon their own line, and the state can interfere authoritatively in the event of any company refusing to comply with these conditions.

Besides the competition of the governmental railways, the private railways of Belgium are subjected to the active and constant competition of the numerous canals, which form quite a network of waterways throughout that little kingdom. From 1850 to 1860, the tendency in Belgium was toward private ownership; since 1860, the tendency has been toward governmental ownership, and this so strongly that probably in a few more years the government will be the owner of substantially all the main lines of rail. [At the end of December, 1907, only 330 miles were, as already stated, owned by private companies out of 2860 miles.] In 1870, about 400 miles of railway were bought by the government, and since that time, about 600 miles more have been purchased. Competition, however, can scarcely be said now to exist in a country where the conditions of the competition are fixed by so powerful a corporation as the state has become, and the private owner is helplessly impotent, and has no alternative but to sell out. Yet the public in Belgium is well and satisfactorily served by its railway system, and none of the disgraceful conditions of our own railway system are known there. The overpowering force of the competition of the state, of course, causes considerable criticism and dissatisfaction on the part of the investors in the shares of private railways, but this competition on the part of the state is not a new matter, as the projectors of the private lines invested their moneys and built their lines with a full knowledge of the competition to which their lines should be subjected. In 1870, the net result exhibited by the state railways was a return of 6 per cent. upon the capital invested, being, on the whole, as great a net result as any railway system in the world exhibits.

France. To each of the great French lines, now [1880 and 1910] six in number (originally nine), a distinct territory was laid out, in which it could construct its trunk line, which was supposed to be a profitable one; it was then required as a condition for having the district handed over to it. also as part of the condition on which it was to operate their main lines, to build a number of feeders and local lines, which were supposed, on the whole, not to be profitable. It was soon found, however, that these secondary lines were so unprofitable and burdensome, that, if they were to be built at all, without danger of the abandonment of the main lines, the state would have to come to the aid of the railways. The state, thereupon, advanced large sums of money to the railways, for the purpose of constructing their loop lines, and made the concessions upon the condition that, at the end of ninety years, all the lines should become state property, and the state was to take the rolling stock at a low valuation.

All the rates of charges, for both passenger and freight traffic, are regulated with the utmost minuteness in France. At any time before the

ninety years expire, the government can purchase the whole of the road at a capitalization of an average of fifteen years' income, after disregarding the two worst years, and taking as the minimum figure of the capitalization the lowest year immediately preceding the purchase, below which figure it may not be capitalized. This is done to prevent the state from resolving upon the purchase immediately after an exceptionally good year. The rates of fare and of freight traffic are, of course, mere maximum rates, the companies being permitted to go as far below such rates as they see fit. Every tariff of charges must be submitted to the government for the purpose of receiving its sanction, and a month's notice must be given of any proposed change.

France has a perpetual committee to supervise its railways and to arrange the tariff of charges, to settle disputes between competing lines and between the public and the railways. This committee is composed of the following persons: A president—the Minister of Public Works; a vice-president, who is the Director-General of bridges, roads, and railways; three experts appointed by the Minister of War; three experts appointed by the Minister of Finance; one expert appointed by the Minister of the Interior; one expert appointed by the Minister of Commerce; two inspectors-general of bridges and roads; one inspector-general of mines, the Inspector-General of railways, and a secretary. This commission

exercises both a commercial and a technical control.

In France, every company is bound to receive and carry forward all goods tendered to it, and to publish, one month in advance, the mileage rate at which it will carry them, and the time within which it will deliver them, varying according to the distance carried. No private arrangement of any kind is permitted to be made with any organization. The terminal charges are all prescribed. No one interested in the stock of the railway, or in its direction, is permitted to make any contracts with the railway for supplies, and even every passenger time-table is submitted to the government for approval.

In France, two tendencies have in recent years striven for precedence: one, the extension of the ownership by the state of the railway system, and the hastening of the right of the state to purchase, in less than ninety years, the rolling stock of the railways, and to acquire the rights of way of the existing lines; the other, a tendency to postpone the acquisition by the state of the railway system of France, coupled with the attempt, on the part of the railway corporations, to make themselves intermediately less dependent on the state. Léon Say, a well-recognized authority in matters of finance and political economy in France, recently became Minister of France. His relation to the house of Rothschild is a well-known one. and it is also known that the house of Rothschild

is the largest owner of the share capital of the most important and richest line of France, the Chemin de fer du Nord. In his budgets, Léon Say devoted considerable space to the financial complications which may arise in consequence of the large additional outlays that may be required by the French Government to acquire the existing lines of rail, and discouraged as much as possible additional outlays by the state, for the present, either to extend the system of existing lines of state rail, or to make any further attempts to acquire such transfer by anticipating the time for the acquisition by the state of the railways. Notwithstanding his powerful influence and the ability which all France recognized in him as preeminently the best qualified statistician and financial administrator, the French Chamber of Deputies refused to give countenance to his suggestions, and he was compelled to relinquish power mainly by reason of the unpopularity of his position on the railway question.

The railways owe the French Government about 600,000,000 francs, and the French Government is now in process of investing additional sums of money, not only for the purpose of building its own lines, but to enable the railway companies to build lines of intercommunication in territory which is admittedly unprofitable.

The ablest and strongest opponent to Say's project was Allain Targé, who, in concluding the discussion in 1881, said:

"You want to temporize with the financial power of the great railways. Know you, gentlemen, what this power is? It is the greatest which now exists in France, next to the state and the order of Jesuits. You are their confederates (addressing the ministry), and do not, as you should, stand in a perpetual condition of warfare with it. You can not deal with the railways as individual associations which are to be regarded each by itself, but you must regard them from the point of view that they have an interest in common, and that this common interest is so great as to make it a serious competitor to the state. They are indeed an imperium in imperio. They have a combined debt of 10,000,000,000 francs, and employ 280,000 officers. They stand in relation with all the trades, industries, commerce, and agriculture of the community, and in their hands rests the fate of all laborers. This enemy you must fight, and the single weapon that you have in your hands is the right to acquisition and purchase. Their first word is, 'No purchase, no acquisition.' You must never surrender this weapon if you desire to hold power against them."

The Chamber, by an overwhelming majority, defeated Say's proposition, and France has again determined that nothing shall interfere with the ownership by the state of the railways at the time originally fixed by the concession, and that if possible that time shall be cut short, under the power of the French Government, by a purchase long

before the ninety years of the original concession shall expire. [The Statesman's Year Book for 1910 says that under the laws of July 13 and December 18, 1908, the Western Railway system was transferred to the state on January 1, 1909.]

North Germany. All concessions are made by the Minister of Commerce, unless there is to be a guarantee of interest, or a subvention of some kind, in which event it must pass through the form of a law. Since the formation of the German Empire, the separate states have agreed to concede to the Empire the power of expropriation, and the new lines are to be constructed under the Empire. This means under the Chancellor of the Empire, who thereupon, through a Reichsgesetz, may authorize the construction of any line involving the interest of the state or of trade.

Prussia. At the commencement of its system of railways, Prussia consciously renounced, as to this service, all the benefits that are supposed to flow from competition. The laws of 1838, section forty-four, enacted that no second railway running in the direction of the first one, and touching the same principal points, should be allowed to be constructed by any promoters or corporators other than the promoters and corporators of the first railway, within a period of thirty years from the opening of such railway. The state, for a due

consideration, by the very same law, however, reserved the right to purchase the property of all the railways and appurtenances organized under that law, after the lapse of thirty years. When such authority was to be exercised, the state was to pay twenty-five times the amount of the annual average dividend paid to the shareholders during the last five preceding years. It was also to pay the debts of the company in the same manner as the company would have paid them.

A number of railways were built by governmental subvention in Prussia, and many of them have since that time become by foreclosure the property of the state. To a great many others large loans were made by the government, subjecting them to such a measure of governmental control as practically to make them state roads. As to all others, the state claims a right of a third part of the net revenue of the lines, beyond 5 per cent.

In 1870, there were in Prussia 3204 miles of rail which belonged to the state, and 3595 miles of rail which belonged to private lines. All tariffs, both for freight and passenger traffic, must be submitted to the government, and receive its assent. These tariffs must be published, and can not afterward be raised without the consent of the Minister of Commerce. At the rates adopted, the companies are bound to convey, without distinction of persons, all goods delivered for conveyance, the transport of which is not forbidden by police regulations.

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Since the war with France, and the consequent acquisition by the Empire of the Alsace and Lorraine lines of rail, by successive enabling acts, the governmental acquisition of railways proceeded with great rapidity, so that each year circumscribed the number of private lines, and now there are but very few lines to be acquired to make the whole railway system of Prussia a strictly governmental institution. Indeed, the railway directory never fully survived the decree of June, 1870, by which the Minister of Commerce took possession of the railways for military purposes, and held possession of them during the war with France. At the close of the war, the state claimed and exercised the right to supervise the expenditure of railways and to take part in their deliberations, also to determine the amount that they are to carry to the sinking fund, and the amount they are to pay as dividends. From that time forth the paternal and inquisitorial power of the government was so relentlessly exercised against them that all power of resistance to state absorption was undermined, and they fell an easy prey to the will of the iron chancellor, Bismarck, who had determined that the lines should become the property of the state. The directors of the private roads protested at first against this interference, claiming that under the laws creating them they were exempt from supervision of that kind. To this the Minister of Commerce answered, that he claimed the right of the royal commission to take part at the meetings of the boards of the private railway companies, so as to see to it that the object of the meetings was in the interest of the public. He said that the railway administration could rest assured that the supervision of the state would make itself less and less felt in proportion as the railway administration, by a prompt, cheap, and safe service, gave evidence to the public that they rightly comprehended and were endeavoring to fulfil, to the satisfaction of important public interests, the trust placed for public purposes in their hands. The Minister of Commerce closed his answer with the following significant admonition:

"I can not, therefore, but recommend that the Prussian railway administrations press no further the opinion of the narrow limits of state supervision over private railways, as expressed in their memorial presented to the Chancellor, as it is a position which certainly is not pressed in the interest of the shareholders. This much is certain, that for a long time past the commercial public has demanded the restriction of the independent power of railway administration, which went beyond the restraints hitherto enforced."

The rapidity with which the acquisition of the private railways by the Prussian Government has proceeded is indicated by the following figures: At the end of 1879 there were 3800 miles of state railways; 2170 miles of private lines under state control; and 6200 miles of private lines under

state supervision. At the end of 1881 there were 7070 miles of state lines; 2170 miles under state management; and 3110 miles of private lines. At the end of 1882 there were 9500 miles of state lines; 1320 miles of private lines under state management; and 2400 miles of private lines. [According to the *Statesman's Year Book* for 1910, the mileage of Prussian railways in 1908 was 22,250 miles of state lines, and 1700 miles of private lines. The editor adds that the whole of the railways of Prussia will in time become national property.]

The control of all this great system of ownership of railways in Prussia is given over to a special administration, at the head of which is the Minister of Public Works, and under him are all the administrative officers, who respectively are located at Berlin, Bromberg, Magdeburg, Hanover, Erfurt, Frankfort, Elberfelt, Cologne, and Breslau. These directors are appointed by the crown, and are special administrators to take the place of the private and individual administrators of the lines to which they respectively relate. These administrators have in charge the expenditure of moneys necessary for the establishment of new lines, and by the law of 1883, 10,000 miles of new lines, to belong to the state and to connect with the existing lines, were devised. Mr. Von der Leyen, himself one of the most intelligent co-operators in this system of state acquisition, and holding a position of great trust under the Minister of Public Works.

in an article published in 1883, in the Annual of Legislation, Administration, and Political Economy. Berlin, says that "the first beneficial effects of the acquisition of the railways by the state in Prussia was the uniformity of tariffs throughout the Empire, and the impossibility of obtaining special rates or personal favoritism; also the extension of the through ticket system, and the cheapening of transportation for working men and persons of moderate means." The beneficial effect of these reforms is indicated by the increase of business. From 1879 to 1882 it rose from 12,000 car-loads to 15,000 car-loads. The surplus available for general state purposes, arising from the administration of the railways, over and above interest on money expended by the state on its state lines and operating expenses, was, in 1878-9, \$1,660,000; in 1879-80, \$3,450,000; in 1880-1, \$9,575,000; in 1881-2, \$7,862,500.

Nearly all railway concessions contain clauses making it incumbent upon the board of administrators of the railway in all cases to come to proper agreements as to correspondence of time-tables in the administration of railways joining each other. The time-tables can go into force only upon the consent of the government. Persons and merchandise must be conveyed in the order in which the application is made. No difference is to be made between passengers and goods which come directly to the lines, and those which come to them in transit from other railways. A special tariff is also

prescribed. The state, therefore, in addition to being represented on every railway board, and being in itself an administrator of railways, enters to a large degree as a member into all the councils of railway management in fixing rates and in determining through traffic.

A writer in the Quarterly of Political Economy, Berlin, 1876, in an argument against the maintenance of private control of railway property, says: "The example of the United States affords nothing to the point. There, the administration and construction of railways in the hands of private individuals and corporations is so bad, and so utterly irresponsible, that that country affords no argument in favor of private enterprise, and vet, notwithstanding this condition of affairs, no one seeks a remedy for the evils there existing by placing the railways in the hands of the state. because corruption has eaten so deeply into the government that its ethical regeneration is scarcely to be expected as long as it has a quadrennial rotation of office, and the state treasury is regarded as the general pocket from which each one is to abstract as much as he can."

The reviewer then speaks of the system in England, in which the railway has, by amalgamation and consolidation, extended itself and become a power within the state so great as to be dangerous to the state. He refers to the speech made by the president of the chamber of commerce of Plymouth, who says that "the railways have become our great highways, and should be regarded from an entirely different point of view from any other undertaking."

The writer further refers in his article to the opinion of the royal railway inspector of Canada, in which he says that the monopoly of the railway in that province has become so great that the question will very soon be debated, whether the railway should own the state, or the state the railway. From all the conditions resulting from allowing free scope in private enterprise in railway construction and management, the reviewer comes to the conclusion that on the whole it would perhaps be better for the German states to own the railways than to allow them to continue to be private enterprises, though subject to state control.

Austria. This country followed the course of France, by making concessions for the period of ninety years to the railways. The government built several important trunk lines at the expense of the state, some of which are operated by private corporations, but it still owns its main trunk lines. Its system of supervision of state lines, as to the tariff of both passenger and freight traffic, is complete. [The state lines were 6,083 miles; companies' lines worked by the state 3000 miles and worked by companies 4249; total 13,332. See Statesman's Year Book for 1910.]

Switzerland. No state lines exist in Switzerland. The republic has allowed private enterprise to

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build a network of railways. It has, however, an extremely effectual system of supervising the tariff of charges which must exist thereon. A perpetual commission regulates the relations of the corporations to the stockholders and the public, and provides for a thorough investigation of their affairs, and their constant publicity. [The five principal Swiss railway lines have since been acquired by the Confederation. They consisted in 1908 of 3171 miles. See Statesman's Year Book for 1910.]

Italy. This country owns of its lines about 1000 miles of rail, and is in negotiation for about 4000 miles more, so that within a very short time it will possess a large majority of the mileage of rail within its own territory. [On June 30, 1905, the government resumed the management of the lines. These lines had been worked under concessions since 1885. The length of state railways in 1909 was 7992 miles out of a total mileage of 10,445. See Statesman's Year Book for 1910.]

EUROPEAN RAILWAYS NOT REGARDED AS PRIVATE ENTERPRISES

In all these countries, therefore, even including England, the railway has never been regarded wholly as a matter of private enterprise. In the majority the state built or assumed ownership of the trunk lines, and in all of the nations of continental Europe the proper conduct of these corpo-

rations has been regarded as so bound up with the welfare of the community that they could not safely be left wholly to private enterprise, but that the state, representing the public, should exercise continuously a more or less rigid control over their construction and administration.

RAILWAY LEGISLATION IN ENGLAND AFTER 1839

Taking up the history of the relation of the government to the railways in England, where we left it with Mr. Morrison's speech in 1839, let us look at the steps taken by the English people and Government to reacquire, as to railway enterprises, the control which, notwithstanding the warnings given by men like Stephenson and Morrison, they had allowed to slip from their hands.

In 1839 an attempt was made by royal commission to subject railway schemes to some harmonious direction as to the points from which the roads were to radiate and to which they were to go, so as to make them somewhat analogous to the French system; but the reply came that it was already too late, because so many railroads had already been constructed and projected that it would be an unjust impairment of the rights of property to interfere with them; that the roads were already built and could not be removed, and that others were too far under way to have their powers changed. Between 1836 and 1839 public agitation was directed mainly against excessive charges

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for passenger traffic; as to which, limitations were thereupon fixed. The powers of the railways had already become so great that many members of Parliament were directly under their influence. and many others owed their seats to the railway power. Notwithstanding this influence, however, a bill was introduced in 1840 to create a commission for the superintendence of railways, the commission to be a kind of sub-organization to the Board of Trade. This bill, after several amendments, was carried, mainly through the influence of Sir Robert Peel, who, although a few years before bitterly opposed to any interference with private control of the railway system, now admitted, "that they were monopolies, and that it was necessary to create some tribunal as a standing investigating committee for Parliament, to prevent too manifest and too great an abuse on the part of these powerful and moneyed organizations." The bill was considerably modified during its passage through the house, more especially in the second section, which, as originally reported, had provided for a uniform system of book-keeping, and for a very thorough system of reports on the part of the railways to the Board of Trade. This provision, however, in the bill that eventually became law, was so emasculated as to require simply reports in such manner as the railways saw fit to make them. The bill as passed embodied a clause which established a bureau of railways as a part of the Board of Trade.

A glance at the 55th volume of Hansard's Debates, p. 125, et seq., will show how greatly the ablest men in Parliament were, at that time, under the influence of general phrases in relation to the non-interference of government, and how completely they misunderstood the essentially monopolistic character of the railway corporation, interference with which was, in this case, a duty which, if neglected, was a renunciation of one of the chief functions of government. It was assumed in the debate, by those who were opposed to the bill, that the right of the state with reference to the railways was entirely limited to securing the safety of the travelling public, and that as to the carrying of freight or goods the railway was an entirely private enterprise, like any other common carrier. The first protest of moment against this view, in addition to Mr. Morrison's efforts, was the publication of William Gault's pamphlet on Railway Reform in 1843. After a very thorough examination of the whole subject, and recognizing fully the fact, that, in its importance, the railway bore the same relation to the highway that the highway bore to the foot-path, inasmuch as the traffic of the country was being carried, to a very considerable degree, almost wholly by rail, he came to the conclusion that the existing lines of rail should be acquired by the state, and that all further extensions of the railway system should be carried on by the state as the owner of the public roads.

At the beginning of the session of 1844, Mr. Gladstone, then President of the Board of Trade, requested the House of Commons to appoint a committee to report what, if any, changes should be made in relation to the consideration of railway bills: what amendments should be made in the railway concessions and franchises already granted, and what changes, if any, should be made in the standing orders as to the manner of the consideration of railway bills. Mr. Peel objected to the extent of the inquiry, claiming that "it" was an interference with vested rights, to consider grants already made. He expressed his conviction, at that time, that the further development of the railway system would bring about a competition which in time would do away with much of the monopolistic character of those enterprises. A committee of fifteen was appointed, and testimony was taken, mainly upon the question of the absence of competition and combination between railways, the building of loop lines for subserving special interests without regard to the public needs, and the tendency to amalgamation which then had begun to make itself felt. A large proportion of the time of the committee was taken up in the examination of the question of minimum rates for passenger traffic. Mr. Glyn, the banker, who, next to Hudson, the railway king, was, at that time, the largest share proprietor in England, and who had been for many years, and was then, the president of the London & Birmingham Railway,

stated his conviction that no corporation ought to have any larger powers than were absolutely necessary for the profitable working of its line; he conceded that if the matter were an entirely new question, he had no doubt whatever but that the best way of dealing with it was for the state to own the railways, because, he said, the people as a whole had as much right to their great public highways as they had to the light of heaven. On economic grounds, however, he disapproved of the purchase of the railways by the state, saying he feared the state would be cheated in the transaction, and intimating that the roads had not cost what they were capitalized at; but he believed that thenceforth it was the duty of the state to control the railways with greater rigor and force. The report finally made by this committee contained a severe criticism upon the then existing mode of considering and passing railway bills, which the report suggested should all be submitted to the Board of Trade for criticism before being entertained by the proper committees of the Houses of Commons and of Lords. Parliament took up the report for action in 1844. The suggestion was then made, that, when any new railway shall, after fifteen years, pay for three successive years, 10 per cent. dividends, it shall be in the power of the Board of Trade to revise its tariff, but in that event, that Parliament must guarantee the 10 per cent. dividend to the railway. This suggestion was again modified by the further

suggestion that the Board of Trade could demand a rebate of the guarantee by reason of bad management. A further limitation was made by providing, that, during the existence of the guarantee, the corporation shall not increase its capital stock, and that at the end of fifteen years the Board of Trade might purchase every new railway at twenty-five times the average dividends of the last preceding three years, from which, however, a deduction was to be made for insufficiency of the permanent way, and for impairment of the rolling stock.

Against the passage of this bill the railways fought principally for time. In this they were aided by the powerful Sir Robert Peel, who suggested that a year's notice, at least, should be given before a bill of such magnitude could be passed. (Hansard's Debates, vol. i., 76, p. 482.)

Mr. Gladstone referred to Mr. Saunders' testimony and to that of George Hudson, showing that the railways did not consider themselves free from competition and opposition by other lines of rail, and his admission was used by the opposition to show that the natural law of competition would apply to cure the evils that were complained of. Mr. Gladstone, in a speech, showed that the threat of the passage of this law did not prevent new railways from being organized; that fifty new bills, representing £20,000,000, had been filed since the report was made. He stated that, though he knew the railway had become sufficiently powerful to send representatives into Parliament instead of

having them hang around the lobby, he did not believe they would become so formidable, or that Parliament had sunk so low, that its members would, at the bidding of the railway interests, refrain from giving their sanction to the bill unanimously reported by their own committee.

John Bright was the most formidable opponent to Mr. Gladstone's suggestion. He was a freetrader, flushed with the great victory which had just attended his efforts in the establishment of his principles, and was ready to apply these principles to the most incongruous subjects. He was in the full vigor of his power, and had already made for himself a great reputation for honesty of purpose and for oratory. He dwelt upon the enormous benefits which railways had conferred upon society, showed that they were the benefactors of mankind, and that monopolies had always been the enemies of mankind; and therefore, he argued, it was monstrous to apply the term monopoly to them. He showed that the railways then already represented, in the way of vested capital, £60,000,000 in England; that they were carrying 25,000,000 passengers annually; and that it was extremely dangerous to interfere with so great and constantly growing an interest.

Sir Robert Peel argued on both sides of the question, but insisted, almost in the spirit of apology, that the government had a right to provide the same sort of publicity, with reference to the railways, that it had provided with reference

to the Bank of England's accounts, and he concluded with asking a vote in favor of the bill. The bill obtained, on the second reading, 186 votes in its favor, against 98 in opposition. Among those who opposed it were Messrs. Bright, Cobden, Milner, Gibson, Ricardo, and Macaulay. was then considerably amended before it obtained its third reading, all the amendments being in favor of the railways. As modified, it was passed. but the modifications made it useless legislation. The changes that were made in it gave the railways twenty-one years instead of fifteen before their railway tariff could be changed, notwithstanding the payment of 10 per cent. dividend. It was then provided that the guarantee of the state should run for twenty-one years after the 10 per cent, annual dividend, thus making it quite certain that the state would never interfere with the tariff. All the deductions which, in the event of purchase, were to be made, by reason of bad management and restrictions upon increase of capital, and for want of repair of permanent way and rolling stock, were struck out. The provisions with reference to the purchase by the government were thus made extremely onerous to the state. As the provision in relation to state acquisition was further modified so that before it could take effect it required another act of Parliament to guarantee the purchase money, the act has remained ever since, to all intents and purposes, a dead letter.

The discussion on this bill did, however, direct

public attention to the question, and the *Quarterly Review* of 1844, in an article on "Railway Legislation" (pp. 224, 280), says in conclusion:

"It is perfectly clear that sooner or later this great public trust can not remain in the hands of private corporations. The railways themselves have given the best evidence of their desire and of the necessity for amalgamation, by which they admit that the individual corporation can not, in a system which requires uniformity and harmony, exercise absolute sway; and when the time shall have arrived that this amalgamation will bring the railway into the hands of the fewer corporations, or of a single corporation, which means into the hands of a few individuals, it is then but a step to the suggestion that the state, for its own safety, is compelled to take possession thereof; for a system of transportation which permeates every part of the land, which destroys and devours every other system of intercommunication, which incorporates itself into every public and private interest, which is as universal and all-present as the arterial and venous systems of the human body, sooner or later will come under the general control, for better or worse, of the state organization."

In 1844, a special act was passed (8 and 9 *Victoria*, chap. 96) by which general leasing powers in private railway acts were restricted, and all powers granted by any private act of that session, to lease, were repealed.

Pursuant to the act of 1844, a railway board,

which existed just one year, was constituted as part of the Board of Trade, the duty of which was to report upon new railway schemes and purchases, and upon proposed extensions, amalgamations, and competition. The board reported by giving its decisions without assigning reasons. It sat in secret, and published no debates. This un-English proceeding subjected it to a degree of criticism and animosity that compelled the government to recommend that the board be abolished, which was accordingly done in 1845. In that year the competition between railway corporations became so keen, and the canal companies suffered to such a degree from it, that a law was passed authorizing the canal companies to vary their tolls, and to borrow money so as to maintain the competition. The railways thereupon rapidly bought up the canals, and canal and railway amalgamations went on with great vigor. In 1846, one year thereafter, a committee of Parliament reported that within that year a large number of canals had passed practically under the control of the railway corporations, and were working under joint management. This committee recommended that all amalgamation between canal and railroad companies should be forbidden, except under the sanction of Parliament. They also recommended that it was absolutely necessary that some department of the executive government should be so constituted as to command general respect and confidence, and to be charged with the supervision of railways and canals, with full power to enforce such regulations as might, from time to time, be indispensable for the accommodation and general interest of the public. They particularly recommended this in view of the fact that the private arrangements which are made between railway companies and railway and canal companies, and which may or may not be *ultra vires*, do not come under the supervision of Parliament at all, and expressed their belief that, with a properly constituted executive body, it would come under their supervision, and could be subjected to restriction.

Between 1844 and 1846, came the period, already referred to, of the railway speculative mania. The influence which that had upon Parliament is given by Francis, in his *History of the English Railway*, in these words:

"Members were personally canvassed, solicitations were made to peers, influences of the most delicate nature were used, promises were given to vote for special lines before the arguments were held, advantages in all forms and phases were proposed to suit the circumstances of some and the temper of others. Letters of allotment were tempting, human nature was frail, and the premium on five hundred shares irresistible. The Athenæum, about that time, said: 'It is the fashion to assume that our legislators are not now open to pecuniary bribes. It may be so, but we must leave that question to be decided by our children's children. If public rumor be no more

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than usually scandalous and false, there are some curious revelations vet in store for these youngsters, relating to railway bills.' The curious revelations had not to be waited for until the birth of our children's children, but they came in 1845, and in the winter of 1846, with the railway crash. A return called for by the House of Commons, of the dealers in railway undertakings, formed a very remarkable blue book. The noble, who, in the pride of blood and birth, had ever held traffic in contempt, was there blazoned as a trader. priest, who, at his desk, prayed to be delivered from the mammon of unrighteousness, was there revealed in the city to sell his scrip at a premium. There were 900 lawyers and 364 persons connected with the banking interest, who subscribed contracts for above £2000; one solicitor was down for £154,000. There were 157 members of Parliament, of whom one signed for £290,000, one for £250,000, and one for £171,000; while the remainder were down for sums which must have influenced their feelings to a degree which might have influenced their votes." (Francis' History of the English Railway, vol. ii, pp. 188-190.)

In 1846, an act was passed constituting the railway commission, which was composed of five persons, the president of which was paid £2000 a year, two members were paid £1500 each, and two others received no pay. The main purpose of this commission was to take into consideration all schemes which were to be submitted to Parlia-

ment, to make special inquiry and reports, and formally to report upon all bills before Parliament on railway matters, so as to guide the parliamentary committee. But as the railway committees of the House of Commons and House of Lords refused to be guided by the recommendations of this commission, it was abolished, and its duties were once more transferred to the Board of Trade. A series of bills was passed to prevent the absorption of lines by rival companies, but the ingenuity of railway counsel was superior to the ingenuity that drafted these bills, and by the purchase of stock of other railways and appointing railway directors who were mere simulacra, the railway corporations absorbed each other's lines without having parliamentary powers so to do.

In 1853, another railway special committee was appointed by Parliament. This committee, after taking testimony, recommended the appointment of a committee of a more permanent character than had theretofore been in existence, to consider all schemes submitted to Parliament at every session, and that a railway department of the government should be created for the purpose of affording assistance and advice whenever the committee might desire it. It then pointed out that amalgamation of railways had proceeded to such a degree in England that each particular part of England had become the centre of a system of railway management of its own, and that the

great railway corporations had swallowed up all the competing and intersecting lines. It suggested the passage of a bill relating to the traffic arrangements between different companies, and submitted a plan of a measure by which the canals were to be maintained. The result of these recommendations was the passage of the canal and railway traffic act of 1854, and a prohibition of preferences in traffic contracts given by different railways. Part of the scheme of the act of 1854 was to submit grievances to the Board of Trade only after the Court of Common Pleas, sitting as a court, assisted by an engineer and barrister, had determined that an actual grievance existed. This part of the act proved inoperative. Lord Campbell foresaw and foretold that it would become inoperative, insisting that a lay tribunal should be created for the investigation of such questions, and that judges were not the proper persons to consider matters of that kind, as they were naturally disinclined to act in an advisory manner to governmental bureaus, and that such disinclination would render resort to them well-nigh useless. However, the law of 1854 contained one very useful provision, to the effect that no preferences of any kind should be given by railways for services of a like character, and forbade all discrimination between individuals as to traffic of like character.

In 1865, a royal commission was appointed to consider the subject of railway communication. It made its report in 1867, after taking a great

mass of testimony as to British and foreign railways. As regards legislation, this commission insisted upon the expediency of requiring the Board of Trade to assist the parliamentary committees by reports. It made many valuable suggestions as to interchange of traffic; it considered the subject of amalgamation, and the necessity of checking it; nothing was done, however, to prevent the proceeding of the amalgamation and consolidation of English railways, as is shown by the fact, that, in 1845, the London & North Western Railway had owned but 379 miles of road, and that in 1870 it operated and owned 1507 miles. The Great Western, which originally consisted of 118 miles, operated and owned 1370 miles in the year 1870. The North Eastern, which in 1846 owned 274 miles, had, in 1870, extended its line so as to be the owner of 1281 miles; and the Great Eastern, which originally had 138 miles of road, operated and owned 874 miles in 1870. Amalgamation had therefore proceeded in England to such a degree that, in 1870, the field was practically divided between the great lines of railway, so that, somewhat like France, England had seven great systems of lines brought into existence without concessions of fields of territory by the state, but which, by the natural course of development and consolidation, and the economy produced by such consolidation, divided the field of railroad enterprise in England, and created a concentrated power that presented at that time to the English Government the formidable question, whether ultimately the state should control the railways, or the railways control the state.

We now come to the most important epoch in the English railway history, one reversing the policy which, down to that period, regarded the railway as private enterprises—the appointment of a joint select committee, in 1872, of the House of Lords and House of Commons, to consider the subject of railways. This committee was composed of Mr. Chichester Fortescue, Lord Derby, the Marquis of Salisbury, Earl Cowper, Lord Redesdale, Lord Belpur, Mr. Hunt, Mr. Childers, Mr. Cross, Mr. Dodson, and Mr. Stephen Cave.

After taking testimony covering, with appendix, upward of a thousand pages of an English folio blue book, the committee recommended the organization of a new tribunal to consider railway grievances, constituted both as a court and as an advisory committee on railway legislation. The committee recommended this course in preference to fixing tariffs by statute, as the change of circumstances often makes such tariffs inapplicable or impossible. This was not only the recommendation of the committee, but followed the opinion of almost every leading railway official of England who was examined as to the proposed remedies, among whom were Mr. Allport, Sir Edward Watkin, Mr. Price, Mr. Broughton, Mr. Dawson, and others.

The committee conceded that it was difficult

to provide any fixed or self-regulating rules which would, through the medium of self-interest or of the ordinary action of law, protect the public. They recommended that the proposed tribunal should be endowed with certain functions, among which were: to see to it that railways publish rates and fares and live up to them, and to consider and act upon such alterations as from time to time are adopted in the classifications; to examine into every case of undue preference; and to investigate complaints of unfairness between traders or between towns and districts, so far as they can be raised under the railway and canal traffic act (Lord Cardwell's act of 1854, and amendments). It having been found that the expense of going to the Court of Common Pleas was so great as to give the wealthy companies great advantages over private traders, and that non-publication of rates prevented the trader from knowing whether he had a case or not, the committee recommended that exclusive jurisdiction be given to the tribunal to examine into cases of preferences, and that appeals from these decisions be limited to such cases as the special tribunal should certify involved questions of law which should be considered by the Westminster tribunals. A further function with which. according to the recommendations of the committee, the tribunal was to be clothed, was to see to it that proper facilities be given for the forwarding of passengers and goods under the provision of the railway and canal traffic act relating to that subject.

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It was conceded, in the report of the committee, by Mr. Broughton, Sir Edward Watkin, and Mr. Price, that the courts were incompetent to deal with the subject, and that arbitration was unsatisfactory; hence the necessity for the organization of a tribunal to secure those ends.

The committee also recommended the control of tolls on canals by the tribunal, and the enforcement of any obligation imposed on the railway companies to secure the proper maintenance of free navigation on the canals. The tribunal was to settle questions between the local authorities and the companies concerning new branch lines, and also to settle all disputes between railway and canal companies. They were also to settle all questions arising between the war and postoffice departments on the one hand, and the companies on the other.

The additional duty to be conferred on this special body was to advise Parliament in reference to railway legislation. As to the necessity for constituting this court, the committee say: "No existing institution possesses the necessary qualities. The Board of Trade has not the requisite judicial character or means of action, a court of law fails in practical knowledge and administrative facility, and the committees of the Houses of Parliament have no permanence." A new body, therefore, was, in their opinion, to be constituted for all these purposes, and to wield all these powers, to be called the railway and canal commission,

and to consist of no less than three persons of high standing, one of whom should be an eminent lawyer, and another a person well acquainted with railway management, their proceedings to be as simple and inexpensive as is consistent with giving due consideration to and hearing questions openly and fairly. In conclusion, the committee state that "competition between railways exists only to a limited extent, and can not be maintained by legislation; that combinations between railway companies were increasing and likely to increase, whether by amalgamation or otherwise; that the self-interest of the companies alone was not sufficiently protective of public interests, and that their interest was only to a limited extent the interest of the public. And it therefore becomes necessary," they add, "to consider what can be done in the way of enforcing statutory obligations." As to the ineffectual character of past legislation, both in limiting dividends and creating a maximum of rate of charge, the committee were by no means mealy-mouthed in the way of condemnation. They say of the railway companies: "They are monopolies who are unlimited in their charges for carriage except by the parliamentary maximum, and who are restricted by no definite limit whatever as regards terminal charges: these two charges they mix up together, and under the present system do not separate. They are practically under no restriction except that of their own interest, which may not be the same as that

of the public. They claim and exercise the right to vary their charges to any extent they please within the parliamentary maximum, to favor one set of men or description of goods at the expense of another; to charge high rates for short distances, and low rates for long distances, or to charge two different rates for the same service if they think it to their interest to do so; and not only do they claim to exercise all these powers, but they refuse to tell the public how they exercise them or why they exercise them. The remedies given by the canal and traffic act of 1854 must. under such circumstances, fail for want of the requisite knowledge; and the recent act, by which companies carrying goods are bound, on application made within a week after payment, to give an account distinguishing between rates for conveyance and terminal charges, is wholly useless, because, in the first place, the trader is practically unable to enforce the law against the rich and powerful company; in the second place, he wants to know what he has to pay before paying it, and also what his neighbors and rivals are paying; and in the third place, because the companies do not themselves distinguish accurately between terminal charges and mileage, and, when an inquiry is made, can give only an approximate answer."

Upon the question whether the interest of the public and that of the companies are identical, in the same sense that they are in the case of a private trader, the committee say that "it must not be hastily assumed that self-interest will play the same part in these large undertakings which it plays in ordinary trading concerns. There is a powerful bureaucracy of directors and officers. The real managers are far removed from the influence of the shareholders, and the latter are, to a great extent, a fluctuating and helpless body. The history of railway enterprise shows how frequently their interests have been sacrificed to the policy, the speculations, or the passions of the real managers. On the other hand, the directors and principal officers of these great undertakings are often men of high standing, who feel that their position is something different from that of mere managers of a trading concern, and become in a certain sense amenable to public opinion, and especially to its expression in Parliament. Thus for good as well as for evil the management of railways differs from that of an ordinary trade or manufacture, and approximates in some degree to the business of a public department." And as a summary of the history of legislation preceding the sessions of the committee, they state "that committees and commissions carefully chosen have for the last thirty years clung to one form of competition after another, but that it has nevertheless become more and more evident that competition must fail to do for railways what it does for ordinary trade, and that no means have yet been devised by which competition can be permanently maintained."

This report, made under a liberal government,

and one which was, therefore, considerably under the influence of the very men who opposed all interference with railways on the ground that such interference was, in one form or another, a violation of the principles of free trade, marked a complete change of the views of the leading political thinkers of England. Even Mr. Bright no longer opposed the formation of a railway commission. Experience had taught the English people that in many departments of human activity the doctrine of non-interference of government would not apply, and not only were railways rapidly being subjected to governmental supervision and control, but also factories, merchant shipping, and other industrial manifestations. The report of the railway committee of 1872 resulted in the law of 1873, creating the tribunal recommended by the commission. The gentlemen appointed by the crown under this commission were Sir Frederick Peel (the second son of Sir Robert Peel), Mr. William Phillip Price, who was for many years the chairman of the Midland Railway Company, and Mr. Macnamara, who held the position until 1877 (the time of his death), when his place was filled by the appointment of Mr. Alexander Edward Miller. Mr. Balfour Browne became the registrar of the railway commission. A large number of cases were brought before the commission, which were promptly and ably dealt with.

The commission was originally appointed for five years. During those five years the railroad

companies tried two different methods of discrediting the commission. One method was, by carrying cases up on appeal, to show that the commission acted arbitrarily and against law; the other was, to avoid as much as possible resort to the commission by complying with all the laws, and settling cases before they could be brought to the commission's attention. By the one course they tried to prove that the commission was composed of men not well qualified for the work, and by the other, that it was superfluous. both attempts they signally failed. The cases carried up by them on appeal were generally affirmed in favor of the commission, and the fact that the fear of the railway commission induced the railway companies to behave with proper regard for the laws which constituted them, and in the interest of the public, did not prove that the rod was superfluous by reason of it not being necessary to apply it, but proved that the very existence of the commission had a wholesome effect upon the railway companies. In 1878, therefore, notwithstanding the efforts of the railway corporations, and more especially the strenuous opposition of Sir Daniel Gooch, chairman of the Great Western Railway, the commission was reconstituted by an act enlarging its powers, and the same commissioners were continued in office. The railway commission is now [1883] a permanent tribunal of the English judicial and administrative system, and will in all probability be made, within

a very short period, one of the branches of the supreme court of judicature, with the power of appeal limited so as to avoid the expensiveness of protracted litigation, ruinous in England to a private litigant, against the practically illimitable purse of a great corporation such as the London & North Western or London & Midland Railway.

With the appointment of the commission of 1873, the English railway system entered upon a new phase. A proposition of the ownership by the state of the railways of England, which twenty years ago [1860], was almost looked upon as chimerical, is now regarded as a very possible, and will very soon be regarded as a very probable contingency. The amalgamations which have been going on have somewhat facilitated this possible acquisition by the state. Lord Derby, in a discussion of that subject at a meeting of the Society of Arts in 1873, stated that he had not the slightest doubt, that, if the public really wanted the railways purchased by the state, it could be done, and the question of price would not present an insuperable difficulty. The first step in that direction has already been taken in England by the purchase of the telegraph lines and adding that service to the postal department of the government.

Mr. Joseph Parsloe, in a monograph on the railways, says upon this subject, after weighing the arguments *pro* and *con* as to state purchase: that "an endeavor has been made to show that enormous benefits would accrue from the manage-

ment of railways by the state. At the same time it should be only after the very fullest consideration of the question, in all its multitudinous bearings, that such a change in working the system should be introduced. It has been a common practice on the part of some critics to characterize as visionaries any who have urged the adoption of a scheme of state purchase; or the ability to form a correct judgment upon the matter has been questioned. For the most part such criticism has originated with those interested in keeping things as they are, and who, while questioning the usefulness of one proposal, have not been prepared with any other to put in its place. It will scarcely be questioned that our railways have in them the material from which it is possible to obtain a much larger amount of national benefit than is now derived. What remains to be done is. that the best means shall be adopted for the attainment of the greatest public good, and if any plan preferable to state management can be devised, it will doubtless be received with satisfaction." He himself seems to be doubtful as to whether any such plan can be devised.

One of the dangers apprehended by the opponents of state interference in England was, that in the creation of a special tribunal to supervise railway administration the individual shareholder would be injured. The very opposite has been the result. Apart from the fact that from 1873 there was considerable additional activity in the

commerce of England, a great general rise in the value of railway securities has taken place since that time, not entirely attributable to the increased activity of trade and commerce, but due in great part to the fact that in England, as in all other countries where private administrations were freed from the direct supervision of the state, the indirect and comparatively remote supervision exercised by the shareholders over the corporate managers was not sufficient to insure the most economical and wisest administration. interests of railway directors would interfere with the administration, would cause the building of loop lines for the purpose of benefiting special local investments by them and their friends, and even the management of English railways is not entirely free from jobbery to benefit members of the boards of direction. The supervision of the state has made this so difficult and almost impossible that the administration of those trusts has sensibly and visibly improved. No interest has reaped a larger benefit, not even the public, than the shareholder himself, from the reversal of the policy of the English Government. Greater certainty and publicity of railway charges, and the system of interchange of traffic, facilitated and enforced by the railway commission, have been of as great a benefit to the stockholder, on the one hand, as the holding of boards of direction to a rigid amenability to the public has been of benefit, on the other hand, to the people.

CHAPTER II

LEGISLATION CONCERNING AND MANAGEMENT OF RAILWAYS IN THE UNITED STATES

ABSENCE OF GOVERNMENTAL SUPERVISION

AFTER the passage by the State of New York, in 1850, of its general railway act (see the preceding chapter) there was inaugurated in the United States a deliberate withdrawal of governmental supervision from railway enterprises, on the theory that they were private businesses, to be left as unrestricted as the manufacture of boots or clothing.

The New York law, with but slight modifications, was enacted by the various States, so as to promote railway building, and also to remove the corrupting tendency of special railway legislation. When each railway corporation was the recipient of a special grant by legislative enactment, the railways, in consequence of the large interests involved, corrupted the members of the legislature, and it was honestly supposed that by permitting everybody to build railways the principle of competition would be applicable. It was argued that there could be no such thing as monopoly in

matters free to all, and that the rivalry between the respective lines for business would create, as to railway administration and railway management, the same beneficial results that rivalry and competition create in other private enterprises. The rapid development of the country from 1850 to 1857, under the low tariff, good crops, and general confidence, in connection with the rapid development of the railway system, prevented, down to that period of time, any evil effects arising from this absence of control from becoming apparent. Though some few evil consequences did come to the surface, yet these were so largely counteracted by the beneficial results of railway construction that the community regarded them as but passing vexatious incidents to a great benefit, and thought that time would cure the evil.

RAILWAY REORGANIZATION COMMITTEES

When, in consequence of the financial crisis of 1857, many of the railways became embarrassed and mortgages were foreclosed, a new device was concocted, which at the outset appeared conservative and innocent enough, but brought in its train evil consequences of considerable magnitude in the relation of the railway to the state. These foreclosures, if carried out rigorously, threatened to destroy the value of all junior mortgages and of railway stock. The junior mortgages and the stockholders thereupon fought desperately in the

courts, to delay as much as possible the right of the holders of the bonds under the first mortgage either to take possession of the railway, or, by a sale under the hammer, to cut out all equities beyond the first mortgage, in the hope that such delay would tide the road over into better times. To bridge over these difficulties, and to prevent such delays, railway lawyers devised a scheme of reorganization committees, to represent in the reorganization of railways all the rights existing with reference to the property at the time of the insolvency, and on their behalf to repurchase the property, and, by a new capitalization, to readjust these rights. Under the reorganization the first mortgage holders received new bonds representing again a first lien, and certificates or bonds to represent accrued interest; the junior mortgages were again recognized by junior liens or preferred stock; and the stockholders generally, on condition of making some payment toward defraying the expenses of the readjustment and putting the line in proper condition, received scrip or stock to represent their former interests in the roads. Bankruptcies, therefore, did not, after this device was generally adopted, produce as to railways the same result in the way of the destruction of fictitious value that they produce by failure in other departments of business, i.e., to transfer the commodities or property, by means of such a sale or title, at bottom or conservative figures; but, on the contrary, the stock and bond capital of the

corporations which had emerged from insolvency came to the surface with a larger capitalization than before default, with no construction to balance the additional capitalization account. Therefore, to enable the corporation to pay, in addition to operating expenses, interest upon its stock, the directors were under the strongest incentive, and even necessity, to oppress, at noncompetitive points, the territory where the railways had a monopoly power.

The courts lent themselves readily to this new device of reorganization, because it appeared to be conservative of vested rights of property, and prevented waste and destruction. The possible influence of these devices upon the future development of the railway system in its relations to the state and the people was either not thought of or disregarded.

From 1857 to 1860 many insolvent railways were reconstructed upon this plan, and at the end of this reconstruction period these railways emerged with a considerable additional capitalization, representing simply accumulated debt. In 1861 the war broke out, severing the lines running north and south, and in consequence of the operations of the government and the increased and feverish activity of the country during the four years of the war, the trunk lines running east and west were greatly developed. It was during this period of the war that Congress began, upon an extensive scale, to charter the transcontinental

lines of rail so as to connect the Pacific coast with the East.

GOVERNMENTAL SUBSIDIES

The charter of the Union Pacific Railroad was passed July 1, 1862. Under this charter the right of way, and a subsidy of land and of money, were granted. By the act of July 2, 1864, the governmental subsidy was greatly increased. Land to the amount of five alternative sections per mile on each side of the road was granted to the railway. The Secretary of the Treasury was required, upon a certificate of the commissioners, showing the completion and equipment of forty consecutive miles of railroad and telegraph lines, to issue to the company bonds of the United States, of \$1000 each, to the amount of \$16,000 per mile; and as to the 150 miles westwardly from the eastern base of the Rocky Mountains, and 150 miles eastwardly from the western base of the Sierra Nevada Mountains, \$48,000 per mile, and between the two mountain chains \$32,000 per mile. The Central Pacific Railroad, chartered under the laws of the State of California, was taken care of in the same manner. A like amount of land was granted to it, and a like sum of money subsidy. These were not, however, the only grants made by Congress in this act. The Hannibal & St. Joseph Railroad, the Leavenworth, Pawnee & Western Railroad, and the Kansas Pacific Railroad became the recipients of sections of land and subsidies of bonds. The Burlington & Missouri Railroad was also the recipient of a land grant.

The act of 1862 gave to the government of the United States, in return for the subsidy, a first mortgage upon the railway property to be created by the Union and Central Pacific railroads. act of 1864 allowed the corporation to postpone the government's lien by a first mortgage to an amount equivalent to the subsidy given by the United States, and made the lien of the United States for its money subsidy subordinate to that of the bonds of the companies issued under such first mortgage. About \$65,000,000 was thus given to these corporations, in addition to their valuable land grants, and the lien of the government postponed to that of another mortgage, authorized to be issued for an equal amount. The Union Pacific Railroad was thereupon constructed by an organization known as the crédit mobilier, composed, as to persons interested therein, mainly of the persons who were instrumental in procuring the passage of the act, and who were the real incorporators of the road. To this corporation all the issues of bonds and stock were made, and it also was the recipient of the subsidy of the United States after building and equipping certain parts of the road. proved an instrumentality of distribution of profits under the cover of building the road.

The grants of land to the Union Pacific Railroad amounted to 2,000,000 acres; to the Kansas Pacific,

6,000,000 acres; to the Central Pacific, as successor of the Western Pacific, 1,100,000 acres; to the Burlington & Missouri River, and to the Sioux City & Pacific, 2,500,000 acres.

On July 2, 1864, the Northern Pacific Railroad was also incorporated, and although no money subsidy was given to that corporation, it was the recipient of the largest land grant of any of the corporations, being entitled to receive under its grant 47,000,000 acres. By the act of July 27, 1866, there was granted to the Oregon branch of the Central Pacific 3,000,000 acres; to the Oregon & California Railroad 3,500,000; to the Southern Pacific, 6,000,000; and to the Southern Pacific branch line 3,500,000 acres. A considerable proportion of this acreage may be saved to the people by the failure of many of these railway companies to complete their lines within the time specified by the acts of incorporation. But these grants show with how liberal a hand the Congress of the United States disposed of the public domain in favor of these corporations, to aid them in the construction of their lines.

During the same period of time large grants of land, owned by the general government within the States, were made by Congress to the States, for the purpose of enabling such States to make large land grants to the railways proposed to be built within their borders. As early as 1850, about 2,500,000 acres were granted to the State of Illinois, and by it granted to the Illinois Central

Railroad, mainly, to aid in its construction. 1856 Florida received grants of land amounting to about 2,000,000 acres, which Florida, in turn, transferred in great part to the Florida Railroad and the Florida & Alabama Railroad. Arkansas was the recipient of more than 2,000,000 acres. which it, in turn, transferred almost wholly to railways. Minnesota, Kansas, Wisconsin, Michigan, and Iowa were all the recipients of large grants of land, from which these States endowed railway corporations by heavy grants of land. The territory of the United States appeared to the legislator of that period an inexhaustible fund of land, and millions of acres were given away with what now appears to be reckless extravagance. Long anterior to these munificences on the part of the general government, some of the States were called upon to aid, by actual grants of money, some of the railways which were built within their borders. The State of New York paid to the various railroad corporations within its borders about \$8,000,000, of which about \$5,000,000, granted to the Erie Railroad Company, was wholly lost, and granted about \$30,000,000 in municipal and county subscriptions.

RIGHT OF GOVERNMENT TO REGULATE RAILWAYS

The right of the United States to charter railway corporations was exercised under the power given to it by the Constitution "to regulate commerce with foreign nations and among the several States and the Indian tribes, to establish post-offices and post-roads," and also under the general authority to execute all powers vested by the Constitution in the government of the United States, and likewise under the authority given to Congress to provide for organizing the army.

The lines of the Pacific roads were constituted post-roads, as they necessarily carried on the function of interstate commerce; and, as they were required to carry the army and army supplies of the United States, the establishment of these corporations as United States corporations is warranted under a liberal construction of the Constitution. As these corporations have been the recipients of immense gifts of property from the general government, and as the latter is in nowise restricted by the prohibition as to impairing obligation of contracts, these beneficiaries can not possibly make any valid claim against being subjected to regulation, even if such regulation be in the nature of afterthoughts on the part of the United States Government in the interest of the people of the country.

ORGANIZATION OF TRUNK LINES

The system of through lines, now known as trunk lines, developed between 1868 and 1872. The Lake Shore road passed under the control of the Vanderbilt interest, and there was no longer

any necessity to break bulk as far as Toledo. The Michigan Southern and Michigan Central likewise passed under the same control, and through lines were established to Chicago, although the several railways remained state organizations, and were never consolidated as one company. The Pennsylvania Railroad, under the name of the Pennsylvania Company, leased the Fort Wayne road in June, 1869; the Erie & Pittsburg, in March, 1870; the Columbus, Chicago & Indianapolis, in February, 1870; the Little Miami road from Columbus to Cincinnati, likewise, in February, 1870, and the Cleveland & Pittsburg road, in 1871. These, together with the Ohio, Madison & Indianapolis Railroad, and the Cincinnati, Wilmington & Zanesville Railroad, gave to the Pennsylvania line practically two lines to Chicago and one to Cincinnati during the same period. Baltimore & Ohio road was opened to the Ohio River in 1852: it leased the Central Ohio road in 1872, and then built an independent line to Chicago in 1874, completing its through connection to Chicago. The Grand Trunk Railway, by controlling and leasing other lines and building links, pushed its connection at about the same period through to Chicago, so that there were substantially, from the seaboard to Chicago, five trunk lines vying with each other for business for the West from the time these trunk lines pushed their connections on to Indianapolis and St. Louis.

FAST FREIGHT LINES

Prior to completing the organization of these trunk lines, freight was compelled to break bulk and suffer transshipment at the end of each State line, where a new corporation took up the traffic and carried it beyond. To prevent this breaking of bulk, and to expedite the carriage of freight, fast freight lines on separate capitalizations were organized, at first by the managers of the railways themselves owning or leasing their freight cars. and then made profitable by special arrangements with the railways readily enough secured, because of the fact that the railway officials themselves were largely interested in the fast freight lines. These lines carried a considerable proportion of the traffic in the period anterior to the organization of the trunk roads. With the completion of the trunk line west came also a change in the organization of the fast freight lines. The managers of the railways became more largely interested in the success of their trunk organizations than in the subsidiary lines that were absorbing a considerable proportion of the business of the roads. These subsidiary lines were therefore broken up, and the private corporations abandoned, and each of the various railroad corporations constituting the trunk lines, in the proportion of the percentage of traffic carried over their roads, as nearly as that could be ascertained, contributed freight cars to the formation of fast freight lines intended to

carry through traffic. Thus a great reduction in the cost and an increase in the speed with which goods were carried were introduced, and it is now no longer necessary to break bulk at various points, but goods can be shipped to their terminus by either of the trunk lines through the instrumentality of fast freight lines connected with them.

From the fact that a large portion of the business of the roads was thereupon done by these fast freight lines, and that these fast freight lines were represented by an independent organization or staff of officers and agents, it was supposed by the public that these lines were barnacles fastened upon the railway companies for the purpose of abstracting from them, to the advantage of the managers and to the detriment of the shareholders, a large proportion of their traffic.

Although this suspicion was well founded in the early history of the fast freight lines, it ceased to be true after the organization of the trunk line system. A peculiar result, however, arose from the existence of the fast freight lines as an independent organization. In consequence of the freedom of the freight agent of the fast freight lines from the direct control of the trunk managers of the railroads, the railroad companies themselves found it almost impossible to fix a rate of freight which would not, in the intense desire to gain traffic, be immediately cut by the fast freight lines doing business over their roads. Thus, contemporaneously with agreements between the trunk line organiza-

tions to maintain rates, an active rivalry was kept up in the rates charged by the railroad corporations themselves and by the fast freight lines which ran over the roads and belonged to them.

INSOLVENCY OF RAILWAYS IN THE PANIC OF 1873

The pool agreement, to which reference will presently be made, removed this difficulty. The financial crisis of 1873, like that of 1857, caused the insolvency of a large number of railroad corporations, and the same proceedings which resulted in the emerging from bankruptcy of the railroad corporations that became insolvent in the preceding crisis, followed the insolvency of the railroad corporations in 1873, by which reconstruction committees were appointed. The various corporations emerged after insolvency through this process of reconstruction with capitalizations of funded debt and stock capital generally larger than that with which they entered into this condition of insolvency, and without any additional road or construction to account for the increase.

The general depression of trade and the failure of crops succeeding the crisis of 1873, and the struggle for business between the roads, caused them to carry through traffic to the east at very low rates, for which they sought to compensate themselves by excessive charges for local traffic. This produced in the western States a very general feeling of dissatisfaction with railway methods and

railway management, and gave rise to what is known as the Granger movement.

RAILROAD GRANTS AND SUBSIDIES IN WESTERN STATES

The western States were more liberal than the eastern States in grants of land and money to railroad corporations. From 1860 to 1870 these railroad corporations not only obtained large donations of land, but counties, townships, cities, and villages desirous to become connected with the network of railways of the United States, and to be brought into active communication with the movement of commerce throughout the country, vied with each other in debt accumulation for the purpose of granting subsidies to railways. A large proportion of the whole bonded municipal indebtedness of the United States is due to what may be termed the frenzy on that subject. This recklessness of debt creation for the purpose of obtaining railway communications has some degree of justification in far western States which it would not have had in any community otherwise situated. France, England, and Germany, and also the seaboard and middle States of the United States, had, prior to the existence of the railway, good means of intercommunication by canals and highways. But, in the far western States, the railway was practically the only road. The western counties, townships, and cities regarded the expenditures on

railways as something analogous or equivalent to expenditures on the ordinary roads, and much of this debt creation was fostered by the influences of the railway corporations themselves, and a great part of it was doubtless fraudulently contracted through the bribing of local officers. many cases the railways obtained subsidies of bonds, which they sold, and never built the railways. A large number of litigations, on the question of the liability of the public bodies granting such subsidy bonds, arose in the States themselves, and many of these were disposed of in the United States courts. The innocent holders of these bonds sought to obtain judgment against counties or towns, which, either failing to obtain the consideration for which the bonds were issued, or discovering that the bonds were fraudulently issued, or from the mere desire to repudiate the burden imposed by the issue, sought to escape from the payment of the principal, or the levying of a tax to pay the interest. In a great number of these cases the decision of the Supreme Court of the United States was favorable to the bondholders, and the burden once imposed was allowed to rest, however recklessly or extravagantly the bonds were issued, and the burdens assumed.

GRANGER LEGISLATION

The extent of this indebtedness, however, added fuel to the spread of the Granger agitation. The

heavy local taxation reminded the farmer or local tradesman of the aid which he assisted in giving and was called upon to pay to the railway; at the same time, the railway, which he supposed would confer upon him a great benefit, was placing his particular locality at a disadvantage by carrying past his door to more distant points and to the seaboard freight at rates very much lower than he was charged as local rates, the reason being simply that the more distant point was a competitive point, and he was entirely at the mercy of a single railroad corporation.

The western farmer's efforts to seek relief from this condition of affairs would have met with very considerable obstruction had he not been aided by the wording and language of the constitutions of the several States, which enabled him to avoid any contract relation being successfully established between the State and the railroad corporation by reason of its original charter.

In the Dartmouth College case it was decided by the Supreme Court of the United States, in 1819, that, by the legislative charter to a private corporation, a contract relation was created, which, under the clause prohibiting the States from impairing the obligation of contracts, forbade the State from thereafter passing laws substantially changing property rights of such corporation. The various States of the Union took alarm at the possible consequences of that decision, and, either by general laws or by constitutional amendment, provided that the legislature should, at all times, be at liberty to alter, amend, or repeal the rights or privileges conferred upon corporations.

The State of New York, after having had for many years a provision to that effect upon its statute books, embodied, in 1846, such a provision in its constitution; and the western States, on their organization, followed substantially the provision of the constitution of New York. In obedience to a strong public sentiment, which made itself felt during 1871-4 throughout the western territory, the legislatures of Iowa, Wisconsin, Illinois, Ohio, Missouri, Minnesota, and Michigan passed laws, known as Granger laws, by which railway commissioners were appointed, railway tariffs sought to be regulated, preferences forbidden, and railways required to carry for the inhabitants of a locality freight at a rate somewhat proportionate to that which they established for through traffic.

This legislation was violently attacked in the courts by the railways themselves, and the bondholders of the railways also called it in question on the ground that such legislation impaired the obligation of their contract, because, though it left the rails and the cars, it substantially took away the profit of operating, and thus, in disregard of the constitutional provision that no private property shall, without compensation, be taken for public purposes, deprived them of property without compensation. These cases came before the Supreme Court of the United States in 1876.

in the test cases of Munn vs. Illinois, and Peake vs. The Chicago, Burlington & Quincy Railroad. This controversy was disposed of by the Supreme Court of the United States adversely to the claim of the railroads and of the bondholders, by upholding the validity and right of all such State legislation.

Panic legislation of this character was, of course, faulty. It proceeded from an insufficient examination of the whole subject. It was, in fact, treating the symptom instead of the disease. Notwithstanding the complete vindication, by the Supreme Court of the United States, of the right of the States to enact legislation laying down tariff rates for railways, whether remunerative or not, the majority of the States which had enacted such legislation receded from their original position and modified their tariff rates; many abrogated them, and contented themselves with the establishment of railroad commissions for the purpose of investigation and examination of grievances, and to report thereon to the legislatures, but left on the statute books, however, prohibitions against preferences, and forbade the railways from destroying the commerce and trade of a locality by rival contests for through traffic.

RAILROAD COMMISSIONERS IN MASSACHUSETTS

In some of the eastern States, notably in Massachusetts, a different course was pursued. In that State an excellent Board of Railroad Commissioners was appointed by the act of the legislature of 1869, composed of Charles Francis Adams, Jr., James C. Converse, and Edward Appleton. duty of these commissioners was to inspect the railway system of the State, and to inquire into accidents and the system of management, as well as the general question of railroad development, and the relation of the community to its railroad corporation. To entertain complaints of individuals or localities against discriminations or unjust treatment, and to report thereon, was also made part of their duties. Authority was also given them to hold public sessions, and to make report of their conclusions to the legislature. They had no judicial powers, but were constituted a general board for public investigation of railway management, thus to draw public attention to, and to bring to bear public opinion upon, the subject. To concentrate responsibility, to sift information, and to advise the legislature, also appertained to their functions. They were subsequently empowered to prescribe and enforce, and they did prescribe and enforce, a uniform system of accounts.

This board has been in successful operation since its organization; and has been of great benefit to the commonwealth which appointed it, and of great service as an example, beneficially imitated by other States, of one of the most conservative modes of dealing with railroad corporations.

Mr. Charles Francis Adams, Jr., the chairman

of this commission, in an argument before a committee of the Federal Congress in 1880, in speaking of railroad management and its relation to the public, says:

"I must ask you to dismiss all preconceptions from your minds, and to fairly consider what is the real cause of the inequality, the injustice, the discriminations of the existing railroad service, those ills of the body politic for which you are now undertaking to prescribe. I will not stop to dwell upon them or to denounce them. It is not necessary to do so, for I hold them to be proven and their existence notorious. The record is full of evidence on the subject. We all know, every one knows, that discriminations in railroad treatment and charges do exist between individuals and between places. We all know that railroad tariffs fluctuate wildly, not only in different years, but in different seasons of the same year. We know that certain large business firms, the leviathans of modern trade, can and do dictate their own terms between rival corporations, while the small concern must accept the best terms it can get. It is beyond dispute that business is carried hither and thither to this point, away from that point, and through the other point—not because it would naturally go to, away from, or through those points, but because the rates are made on an artificial basis to serve ulterior ends. In regard to these things, I consider the existing system nearly as bad as any system can be. Studying its operations as I have, long

and patiently, I am ready to repeat now what I have repeatedly said before, that the most surprising thing about it to me is, that the business community sustains itself under such conditions. The first principles of law governing common carriers are habitually violated. Special contracts covering long periods of time are made every day with heavy shippers, under which the common carrier, whose first duty it is to serve all equally, gives to certain parties a practical control of the markets. There is thus neither equality nor system, law nor equity, in the matter of railroad charges. A complete change in this respect is a condition precedent to any just and equitable system of railroad transportation."

Coming as they do from a gentleman of high. authority, who for ten years held the position of Chairman of the Railroad Commission of the State of Massachusetts, and who at the time when he spoke had held for one year the position of arbitrator, selected by the great trunk lines to settle disputes and differences between them as one of a court of three arbitrators voluntarily constituted. these words are more cogent, and are to be assumed as a more correct representation of existing conditions [in 1884] resulting from the development of the railroad system of the United States, than any speech, either of granger suffering from his particular grievance, or of railway president anxious to retain his hold upon a monopoly interest.

The attempt to enforce upon the railways of the State of Massachusetts the adoption of a system of accounts prepared by a set of "theorists," was vehemently opposed by the railway corporations. who called it an infringement of their chartered rights, which would prove a mere appliance for exacting blackmail, and expose details of management concerning which the public had no interest. The commissioners, on the other hand, insisted that the community had an interest in its railroad lines, and that an administration which was a mere hot-bed of abuses should be thereafter managed in full public view. To the new system of accounts prescribed, the railways quickly accommodated themselves, and, much to their surprise, they experienced no evil result from rendering accounts intelligible to public bodies and to the public at large, but rather found great benefit to flow therefrom.

The instances of the failure of the Eastern Rail-road Company, the sudden collapse of the New Jersey Central and of the Reading railroads, show how utterly unable was the public to form, from the published accounts in annual reports, any adequate conception of the condition of railroad property. In each of these cases the annual report preceding the insolvency claimed the roads to be financially in flourishing condition. Against such abuses as these, the system of uniform accounts and thorough investigation seems to be a specific. On this subject and its success, the

Massachusetts commissioners, in their report for 1879, draw a very correct line of distinction. In speaking of the spirit which called forth an investigating board such as the Massachusetts commissioners, and that which prescribed a hard and fast tariff of rates for railway companies such as granger legislation attempted, they say:

"After a careful investigation, which extended through a year, and the conclusions of which are to be found in its earlier reports, this board wholly rejected the idea of attempting to regulate railroads in this country, at least through direct legislative intervention. It was said that such an attempt would result only in failure, or perhaps generate new and dangerous abuses of its own. The board, on the contrary, maintained that every desired result or needed reform could be secured by simply developing in the public mind the idea of corporate responsibility, and supplying the necessary machinery to act directly upon it. To bring this about, it was necessary to force the corporate proceedings into the full light of publicity, and to compel those responsible for railroad management, whenever an abuse was alleged, to submit to investigation, and to try to show that the abuse did not exist. Failing to do this, their only alternative was to discontinue its practice or to persist in it in open defiance of public opinion. This is the theory of railroad regulation now known as the commissioners' system, in contradistinction to the granger system. The public supervision of

the accounts of the railroad corporations is an essential feature in the successful development of this theory. If that can be established, it will certainly lead to the gradual abandonment of the granger system in favor of a supervisory system. The commissioners believe that it has been established in the practical experience of the Massachusetts railroads in the last two years, and they further believe and say that the system works well."—(Massachusetts Railroad Commissioner's Report, 1879, pp. 29, 30.)

NEW YORK'S EFFORTS TO CURB THE RAILWAY POWER

In New York State the Board of Trade and Transportation, a body originally organized under the title of "The Cheap Transportation Association," set itself the task, in 1873, of bringing the railway corporations of the State of New York to public amenability. From 1850 down to that period, no serious attempt had been made in that State to create in railroad management any sense of public responsibility. The reports which the various railroad corporations of the State were required to file with the State Surveyor and Engineer, were almost wholly meaningless. No balance sheet accompanied the reports, and the railroad corporations, in conforming with the letter of the law, vied with each other in giving as little information as possible. The State Surveyor had neither power nor desire to make any independent investigation. He simply published from year to year such information as the railway corporations saw fit to give him. No penalty, which had the slightest deterring influence, was imposed for giving insufficient or even false information. The State law forbade parallel lines from being leased to each other. Nevertheless, railroad corporations, by purchasing the majority of the stock of the parallel lines, ran them in the interest of their main railroads.

In 1868 a consolidation took place between the New York Central and the Hudson River railroads by which they subsequently became one line. On the consummation of the consolidation new stock was issued, substantially doubling the capital, or. in other words, watering the stock, of both lines. This watering of stock was promptly legalized by the legislature of the following year, which conferred authority for exchanging the certificates into shares of stock. Thus, these roads in their new capitalization neutralized all the advantages they had of easier gradient and no mountains to pass over, which had given to New York State cheaper railway construction than to Pennsylvania and Maryland. Although during the summer months, when canal competition is active, or under circumstances when the competition for through traffic with other roads creates a strife, capitalization is of little or no consequence, yet, on the local traffic. capitalization produces the result of compelling

the local shipper to pay such a rate as to make it possible for the proprietors of the road to pay dividends on their stock. By the general railroad laws of the State of New York it is provided, that when the dividends of any railroad corporation shall reach 10 per cent., the State can declare how the surplus above the 10 per cent. shall be applied. This provision, however, was made quite nugatory by the trick of stock watering. It is clear, if with each increased valuation of the road the proprietors can declare stock dividends not representing construction account, that a dividend of 10 per cent. on stock will never be declared, although in point of fact the railway may be earning 20 or 30 per cent. upon its actual cost of construction.

This bold stroke of financial policy, which laid the foundation for the colossal wealth of the Vanderbilts, drew attention to this evil, and gave to the Cheap Transportation Association (subsequently the Board of Trade and Transportation) an excellent ground for agitating the subject of railroad abuses. To this agitation considerable vigor was imparted about this time by the discrimination then practised against the interest of the commerce of New York, whereby the railroad corporations chartered by the State of New York made more favorable rates to Baltimore, Philadelphia, and Boston in their charges, for all west-bound as well as east-bound freight, than to New York.

One of the periodical treaties of peace after a railroad war of great intensity gave to Philadelphia an advantage of two cents a hundred on freight rates from the West, to Baltimore four cents a hundred, and to Boston the same rate as was given to New York, on the lowest class of freight. the western-bound freight the discrimination against New York in favor of Philadelphia and Baltimore amounted to from seven to ten cents a hundred on the different classifications of freight. This difference in rates was made on the theory that Philadelphia and Baltimore were relatively nearer to the western centres than New York. Boston, however, which was farther away by two hundred miles than New York, was given the same rate. On east-bound freight the theory upon which the discriminations were made against New York was, that the ship charters from and to New York were lower as compared with the other This, however, on examination seaboard cities. proved untrue. Upon this state of affairs being made apparent, the Chamber of Commerce, as well as the Board of Trade and Transportation, took up the question of railroad discriminations, and in a report published by the Chamber of Commerce in 1878, it appeared that during a considerable part of January of that year the rates over the New York Central, the Erie, and the Grand Trunk roads were, from Boston to Chicago, from thirty-five to forty cents a hundred. From Boston to Chicago salt was shipped at fifteen cents, while

forty-five cents was the lowest rate from New York. From Philadelphia to Chicago the rates during the same dates were made as low as seventy cents on first-class goods, while during the same period the rates were maintained at a dollar from New York to Chicago. The lower classes were relatively as high. The committee reported that goods stored in New York were shipped to Boston to be forwarded to the West through New York over the Erie road, or via the Boston & Albany over the New York Central road, at a saving of almost 50 per cent. over direct shipments from New York. Through freights from Liverpool to Chicago, fourth class, were as low as twenty to twenty-five shillings per ton, while the rates remained from Liverpool to New York forty to forty-five cents per hundred pounds, equivalent to about thirty shillings per ton. These facts were brought to the attention of the railway presidents, and their aid was solicited to remove the discriminations against New York. They made a contemptuous answer, Mr. Vanderbilt more especially drawing attention to the facilities offered by other cities to their railroad corporations, and claiming that the New York Central had not the same facilities offered to it by the municipal government, and that the merchants should use their influence upon the municipality to extend the facilities afforded the railway corporations in like manner as facilities were extended to the Pennsylvania Railroad by Philadelphia, and to the Baltimore & Ohio Railroad by Baltimore. A commissioners' bill, which had been drawn, was, for four successive years, submitted to the legislative committees of the State of New York for action, but in almost every instance it had either been reported upon adversely, or, if reported favorably, had, through the influence of the railway companies, been smothered in one or the other of the Houses.

Finding redress impossible through the voluntary action of the corporations themselves, the Chamber of Commerce, through its committee on transportation, therefore determined to lend its aid to procure the establishment of a railroad commission for the State of New York.

Besides the grievances before referred to, another, of an extremely burdensome character, which affected the people of the State at large, also existed at that time. Between 1875 and 1877 the great railway corporations entered into an active railroad war, and in consequence of the resulting freight rates, cereal products and flour were frequently carried by the companies at a loss from the West to the seaboard. That loss might possibly have financially ruined the railway corporations of the State had a corresponding reduction been made in their local tariff; but to recoup this loss on through rates, they maintained, as to the local shipper, rates which under such circumstances became extortionate; thus making the people of the State bear the burden, through the exactions

of the local tariff, of the trunk line war, in the same manner as though the State were at war and had levied a tax upon its inhabitants to maintain it. This discrepancy between through and local tariffs led to the practical abandonment of milling at the great flouring centres of the State of New York, such as Rochester and Black Rock. It was impossible for them to maintain competition against the Minneapolis miller who had his cereals produced at his door and had the flour carried to New York at twenty cents a hundred, when they were compelled to pay more than that for the mere carriage of the wheat to their mills, and a higher absolute rate for the carriage of the product of their mills to the seaboard.

The grazing and cattle interest of the western part of the State suffered in consequence of the low rates of carriage from the western country of cattle on the hoof, and a destruction of interests took place to such an extent that grazing and cattle-raising became a non-remunerative occupation solely by reason of discriminating freight rates against the western part of the State. These subjects were taken up and agitated by the State Grange organizations and the Farmers' Alliance, who joined hands with the Chamber of Commerce and Board of Trade and Transportation in insisting upon some remedial measure against such discriminations.

Another abuse, which, however, was carried to its extreme limit by the New York Central Rail-

road Company, gave additional ground for com-This abuse was the entire abandonment of any fixed schedule of tariff rates for local traffic. There was a tariff of rates which existed only for the unwary shipper who made his shipment on the assumption that all shippers were treated alike. and he was punished for his want of knowledge by being compelled to pay extortionate rates. special rate, which was entirely personal to the particular shipper, was made almost invariably. on application, by the freight manager of the New York Central Railroad, exercising his discretion to make it as he saw fit. At the time when a legislative investigation was ordered, there were in existence on the line of the New York Central Railroad upward of 6000 different contracts varying in the most arbitrary manner the published schedule rate for the carriage of local freights. Underlying these special rates there was neither principle based upon car-loads or train-loads as contradistinguished from single packages, nor upon extent of business or readiness of handling, nor any other well-known basis of railway manage-They were granted as the caprice, the whim, or the interest of the railway freight agent dictated. The charge that such discriminations and special rates existed, when made to the legislative committee appointed in 1879, was at first flatly denied, but within the first few days of the investigation which followed, and to which reference will presently be made, it was overwhelmingly proved.

THE RAILWAY INVESTIGATION IN NEW YORK IN 1879

Public opinion had become so agitated upon the subject that at last all the opposing influences of the railways in the Assembly were overcome. An investigation of the railway system of the State of New York was ordered by the legislature of 1879, and a committee appointed to investigate the abuses alleged to exist in the management of the railroads of that State. This committee was composed of A. Barton Hepburn as chairman, Henry L. Duguid, James Low, William L. Noyes, James W. Wadsworth, Charles S. Baker, James W. Husted, and Thomas F. Grady. The committee invited the Chamber of Commerce and Board of Trade and Transportation, which had made the charges upon the basis of which the committee was acting, to appoint counsel to conduct the examination, and stated that the committee would give to such counsel standing before it by substantially adopting him as the counsel of the committee. Under this invitation the Chamber of Commerce and the Board of Trade and Transportation appointed the writer hereof as its counsel to conduct the investigation, and then during a period of eight months the investigation proceeded in the taking of testimony and the preparation of its report.

EFFORTS TO MAINTAIN RATES UNDER FINK COMMISSIONERSHIP

Prior to the appointment of this committee, a

great change had taken place in the management of the great trunk lines in their relation to the public. Mr. Albert Fink—who had been the vice-president of the Louisville & Nashville Railroad, and who was commissioner or chairman of the committee of the Southern Railway and Steamship Association, which was comprised of twenty-five railroads, and who by a pooling arrangement of freights in the organization of that association had substantially stopped railroad wars and competition among them, and the success of whose management had drawn attention to his executive ability—was invited by the railroad magnates of the East to organize, upon the plan of the Southern Railway and Steamship Association, an organization to keep the peace and maintain rates for the trunk lines centering at New York, Boston, Philadelphia, and Baltimore. Down to that period of time every attempt to create a "joint purse," as it is called in England, or a "pool," as it is termed in the United States, by which, to prevent railway wars, the proceeds of freight charges were divided between the railway companies, had proved fruitless. Scarcely was the ink dry on the contract made between the railway presidents before each particular railway company attempted, in one way or another, to break away from the contract thus made. So little under control were some of the freight agents, that even if the railway presidents desired to maintain the contract in its integrity, they found it impossible to control the

various freight lines doing business over their own roads, and the contracts were broken almost as soon as made. Thereupon, in June, 1877, Mr. Fink was appointed commissioner of the four trunk lines, the Baltimore & Ohio, the Pennsylvania, the Erie, and the New York Central & Hudson River railroads. In December, 1878, he was further appointed commissioner of the comhined trunk lines of the western roads. A contract was made by which, in addition to the agreement as to regular tariffs, each railroad corporation agreed to accept a certain percentage of all the freight that was offered, and to send to the other lines which had a deficiency whatever surplus was offered to it, in consideration of which it was likewise to receive from the other line its own deficiency. Substantially it was then agreed as to west-bound freight, and subsequently as to eastbound freight, that the roads were to be operated with reference to traffic as though they were one corporation, and Mr. Fink, as a commissioner, was to see to it that this arrangement was faithfully carried out. He had supplied him a large staff of clerks to make these equalizations from time to time. A further development of this principle was the appointment of arbitrators, three in number, to determine disputed questions. The system has certainly resulted, first, in maintaining rates, and secondly, in stopping railroad wars between the contracting parties. A railroad war. while, on the one hand, reducing rates, produces,

on the other hand, great demoralization in commercial transactions by the element of uncertainty caused by the absence of a certain rate, vastly more expensive in its ultimate results than the higher rate for freight.

THE HEPBURN COMMITTEE REPORT

The all but unanimous report of the investigating committee appointed in 1879 was made after an exhaustive inquiry, contained in five closely printed volumes of testimony. This committee, in summing up the condition of railroad management as they found it in the State of New York, passed in review the various abuses which had grown up under the management of these great highways by private corporations without responsibility to the State. They referred to the evil of the drawing-room or sleeping-car companies, which, by their contracts with the railroad companies, created a special interest that diminished the return of the shareholders of the railroad companies. They spoke of the fast freight lines and express companies as then conducted as free They condemned the methods by from evil. which the stock-yards at the terminal points of the railways were let out to individuals, and spoke of this as an instrumentality usually attended with additional taxes upon transportation. They considered the suborganizations of railways in the way of coal companies and elevator associations, which they designated as barnacles upon

commerce, as organized for the purpose of tolling the commerce of that port (Buffalo) to the greatest possible extent. In alluding to watered stock, the committee referred to the fact that it was proved before them that \$40,000,000 was probably the whole value of the property and equipment of the Erie Railway Company, and that \$25,000,000 more would cover all the additional value of the road, as represented by stock and bonds and interests in other corporations, while it was capitalized at about \$155,000,000; that its construction account covered in 1873 an item of "legal expenses" of \$891,000; and that the watering of the stock of the Erie Railway, as well as its bonds, was estimated by them to be not less than \$70,-000,000. They proceeded to examine the accounts of the New York Central Railway. They found that in 1853 the stocks and bonds of the roads which at that time formed the various links of the chain of consolidation thus effected, amounted to a total of \$23,000,000, and that at the time when the first consolidation was effected, premiums, or, in other words, water, to the extent of almost \$9,000,000, were given to the stockholders and shareholders of these various roads. From 1868 to 1870, by the consolidation of the New York Central and the Hudson River railroads, over \$44,000,000 was added to the combined capital of both these roads, by stock dividends of 80 per cent. on the New York Central road in 1868, and 85 per cent. on the Hudson River road.

The committee passed in review local questions, which it is not necessary to enter into here, on the subject of the terminal facilities and the injustice done by the discriminations against New York by the arrangement of discriminating rates, and then they touched upon the abuse fully developed before them, connected with the Standard Oil Company.

It appeared by the testimony submitted, that on Jan. 8, 1872, the Central, Erie, Lake Shore, and Pennsylvania roads made an agreement with the South Improvement Company, a Pennsylvania corporation, giving to the improvement company, on shipment of oil to different points, rebates ranging from forty cents to \$3.07 a barrel. The agreement provided that its object was to maintain the business of the South Improvement Company against loss or injury by competition, and that the roads would lower or raise the gross rate of transportation over their respective railways and connections, to such an extent as might be necessary to overcome all competition.

When the agreement became public, the legislature of Pennsylvania was compelled by public opinion to vacate the charter of the corporation. A more ingenious and secret agreement, however, was subsequently made with the Standard Oil Company, by the railroad corporations, securing to that corporation the objects which were intended to be secured to the South Improvement Company. This company, originally composed of

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a few enterprising oil men of the western States, gradually absorbed into its management the Standard Oil Company of Cleveland, the Standard Oil Company of Pittsburg, the Acme Oil Company of New York, the Imperial Oil Company of Oil City, the Atlantic Refining Company of Philadelphia, Charles Pratt & Co. of New York, the Devoe Manufacturing Company of New York, I. A. Bostwick & Co., and Messrs. Rockefeller, Day, Flagler, Warden, Frew & Co., and others.

This combination against the remainder of the trade, now banded together under the name of the Standard Oil Company, was characterized by the committee as a flagrant violation of every principle of railroad economy and natural justice. It resulted in driving out of business nearly all competitors, and enabled the Standard Oil Company to purchase, at such rates as they saw fit, the refineries distributed over the United States, which they desired to control either for the purposes of manufacturing or to dismantle. This threw the production, distribution, and refining of oil into the hands of a single corporation, to the extent, estimated at that time, of 95 per cent. of the whole product. In this regard the committee said, that from January to October, 1879, the total shipments from the oil regions to all points were 12,900,240 barrels, and that all shipments to the seaboard would have easily borne one dollar more per barrel than they did (the rate then being about twenty-five cents a barrel); that, tested by the charge which the roads imposed upon every other commodity, it should have borne that much more; and that all the trunk lines had grown into such relations with this oil company that they were forced to forego all these millions they might have earned, and compelled to look to the other products of the country for their revenues; thus burying their own interest in the interest of the Standard Oil Company, and joining in this war of rates to protect the latter against injury by competition.

The attention of the committee had been drawn to the evils connected with the proxy system, by which railways were captured by the mere purchase of voting power from persons, mainly bankers, in whose names large amounts of stock were registered, but which had been sold and distributed to their customers, and for prudential reasons were left standing in their names on the stock books of the companies. This situation gave to such persons a large voting power in the railway without a substantial interest or stake in the result of the vote. To persons who desired to capture the road, it was a strong temptation to purchase such voting power; and, to persons who had no permanent interest in the road, it was a corresponding temptation to sell the power, the evil effects of the sale of which they were not personally called upon to bear. The committee, therefore, recommended the passage of a bill to remedy this abuse.

The committee likewise condemned the system

of reports to the State Engineer and Surveyor, and then passed under review the system of special rates, which was founded upon no other basis than the arbitrary will of the freight agent in giving individual shippers, located in the same town, rates varying as much as thirty cents a hundred. The committee investigated the theory that had been advanced by all the railroad experts of "charging a traffic what it will bear." Of this they said, that, "as to an increase of from fifteen cents in August to forty cents in November on grain, the rate was raised simply because the condition of the market warranted it, and the product could bear it. It would be difficult to make a criticism upon that raise which public judgment would sustain, but we are distinctly told that public interest plays an insignificant rôle in the theatre of railroad management. It is at best but a service waiting upon the interest of the stockholders. The wrong consists in exercising a censorship over the business affairs of the community; secretly, arbitrarily, and unequally varying rates, building up this, developing that; not only performing the proper functions of transportation, but taking into consideration the probable or possible profit of a shipment, and adjusting their rates accordingly. If the shipper is likely to make a large profit, they compel him to divide; if the margin is a close one, they determine whether the shipment shall be made or not, whether it shall result in a profit or loss. Thus, under this system of management, and this method of giving rates, is every merchant, every manufacturer, every shipper, and, through them, every individual along the 5500 miles of railroad in this State, with its five hundred millions of capital, measurably in the power of these corporations. Conciliate their good will, court their favor, and favorable rates will follow; incur their hostility, and the margin of their displeasure may be read on your freight bills."

The committee spoke of the enormous political influence wielded by corporations then having in their employ upward of 30,000 voters. They spoke also of the contemptuous disregard exhibited by the railroad corporations of the State to the milling interest, in April, 1879, when they answered a temperate statement of grievances by saying, that "the first condition of having them listened to was to retract their signatures from a certain circular, dated March 15, 1879," in which these grievances were stated in moderate terms, and "to withdraw their support from a *pro rata* freight bill, which was then before the Assembly."

The committee concluded their analysis of the testimony with a citation of the Shoelkopf & Matthews agreement, whereby the New York Central Railroad bound itself to carry to New York, for these millers situated at Niagara Falls, at a pro rate of the through east-bound rate on grain or flour, whatever it might be, which enabled these millers to maintain their mill in full operation while their neighbors were going out of business

simply because they had not as favorable a contract. The contract appeared to have been made for five years, and was to be valid on condition that it was to be kept secret. Personal discrimination could go no farther than was illustrated in that case.

This investigation proved conclusively that every charge that had been made against the rail-way corporations by the commercial bodies of the State was under-stated rather than over-stated; that these great trusts had fallen into the hands of persons who exploited them for their personal benefit solely; that the public was only in so far regarded as any tyrant would regard the public; that it was dangerous to exasperate them too much; and that as freight charges are in the nature of taxes, if a continuous revenue from taxation is wanted, it must stop short of confiscation.

The recommendations of the committee, therefore, were embodied in bills which embraced, in substance, the commission bill which, with some slight modifications, had been previously drafted at the request of the Board of Trade and Transportation; a bill upon the subject of railway proxies, railway consolidations, and stock waterings; a bill to regulate the transportation of freight by the railroad corporations, so as to prevent unjust discriminations; and a bill to insure a uniform system of accounts and a different system of reports.

Of these bills, the one to create a board of commissioners became law; likewise the one, with

considerable modification and amendment, upon the subject of proxy voting; also the one which prescribed a different method of rendering accounts. The other bills failed of adoption.

RAILROAD COMMISSION ACT IN NEW YORK

The New York commission bill was passed, and Governor Cleveland, as one of his first acts after his installment into office, appointed Messrs. Kernan, O'Donnell, and Rogers commissioners. The bill authorized the Chamber of Commerce, the Board of Trade and Transportation, and the Anti-Monopoly League, to nominate one of the commissioners to the Governor; and Mr. O'Donnell was so nominated by two of the three bodies, and the Governor, under the bill, made the appointment.

By the establishment of this commission, the long struggle between the railways of the State of New York and the people was brought to a close, favorably to the people. A body has now been interposed, with power somewhat similar to that of the Massachusetts commission, between the people and the powerful railway corporations, clothed with authority for searching and continuous investigation and, in all probability, that body will prove to be a permanent one. The sense of responsibility in the performance of the task, together with the natural aptitude of intelligent men to grow to the work they have in hand, will, in time, make this commission a valuable aid

to proper legislation. The important interests constantly connected with the subject committed to their care will cause the work of the commission to be carefully watched, and the strong temptations that are placed in the way of these commissioners, in consequence of the enormous wealth and power of one of the parties constantly before it, will inevitably cause the commission to act with prudence, for the purpose of shielding themselves against suspicion.

RAILROAD COMMISSIONS IN OTHER STATES

During the same years, other States had parallel experiences in struggles for the appointment of railroad commissioners. There are now [1883] in existence fourteen railroad commissions in the various States of the Union [45 in 1910], whose business it is to supervise and investigate, if not control, the railroad corporations within the State; to report such amendatory laws as in their opinion are necessary for the purpose of correcting the abuses incident to railroad management; and to cause actions to be instituted to prevent either violations of charter limitations or violations of the rights of shippers or passengers, which may be brought to their notice. [In 1910 nearly every State had a Board of Railroad Commissioners.]

During this period, the valuable reports on internal commerce, issued by Mr. Joseph Nimmo, Chief of United States Bureau of Statistics, aided considerably in creating an enlightened public opinion on the relations of the railways to the State, and the part that they perform in the movement of the commerce and development of the industry of the nation.

EFFORTS TO REGULATE COMMERCE BY COMMISSION OR BY PRO RATA FREIGHT BILL

During the last five years [1883], efforts were made in the United States Congress to create a Board of Railroad Commissioners for the United States, to exercise over all the railway corporations doing an interstate business the same kind of supervision and control as is exercised by the various State commissions over corporations chartered by the several States. Almost pari passu with this attempted reform, an annual effort is made in Congress to regulate interstate commerce, without the intervention of a commission, in the passage of a freight bill, in the nature of a pro rata bill, containing anti-discrimination clauses. Thus far, the advocates of the two measures have opposed each other, and probably no good results will be accomplished until the friends of federal legislation agree upon a commission bill, as the entering wedge to such legislation as should properly be passed by the United States, for the purpose of making this enormous interest, in the aggregate more powerful than any single State organization, amenable to the better concentrated public power,

as represented in the United States Congress. The railroad corporations, organized by the States, have thus far resisted, at every step, every attempt to make them amenable to federal legislation. Although many of these corporations derive their charter powers from several States, and substantially run cars over the territory of half the Union, they nevertheless insist that they are amenable only to such States as have granted them their charter privileges, and that the United States Congress can not properly exercise any control over them. The necessity of the case, as well as sound logic, fights against their cause; and the time is not far distant when the people, as represented in the general government, must take in hand the railway corporations of the United States, concentrated as they now are in power by becoming more and more under the control of a few leading minds who can be gathered together in a single room of a gentleman's private house, and, for weal or for woe, can, and do, more materially affect the welfare of the people of the United States than can any representative body organized in any of the States of the Union or under the federal constitution. It is, therefore, not a figure of speech to say that an imperium in imperio has grown up in the community, which, by combination and concentration of power, is more powerful than the community, and that the question of making it amenable to the general powers of the government is no longer one of expediency, but one of

prime necessity. [The Interstate Commerce Commission was established by an act of Congress in 1887.]

QUESTIONS STILL UNDETERMINED

This brings us to a consideration of some of the general questions, which are as yet unsolved problems, with reference to the government of railways, either by the State or by private management.

RAILWAYS CANNOT COMPETE LIKE OTHER BUSINESSES

The general result of investigation in the past fifteen years of the railway question in the United States, and the development that has taken place, both in railway construction and in many of the evils incident to railway administration, have modified both public opinion and the opinion of experts who are not blinded by personal interest, on the subject of the extent to which competition is a regulator of the price of service in railway transportation. It went hard for the free-trader to surrender his faith in competition and to admit that it is not a universally applicable principle. It has now been ascertained that, notwithstanding the enormous progress of railway construction in the United States within the past thirty years [prior to 1883], railways can never be multiplied to such an extent as to make them compete in the

same sense that grocers, butchers, hatters, and shoemakers compete. They will be at war for a time, and then comes a long period of peace, when the railways work under combination even at competitive points. It is difficult to tell whether the war is not more injurious than the peace, so far as public interests are concerned. When there is competition between rival hatters, customers are treated alike at one or the other shop in the purchase of the commodity they want, and even if they are not so treated, no great harm is done. A railway war is generally carried on secretly for a considerable period of time before open hostilities Railways, in vying with each other for business, seek to obtain the more important customers from each other, and make concessions to larger shippers which they are not ready to make to the smaller men. This instantly gives to the larger shipper so great an advantage, in addition to that which he already has by reason of his greater capital, over the smaller man in the same line of trade, that the smaller dealer does his business at a loss; he discovers that his formidable rival can offer goods at prices with which he can not compete, and he is frequently driven out of business or into bankruptcy by reason of a secret advantage which his stronger competitor has in transportation rates.

Thus monopoly breeds monopoly, and centralization of business is built up, not by greater natural aptitude, but by injustice and wrong.

Even during periods of railway peace these advantages are frequently got and maintained by the more formidable shipper for the purpose of tying him to a particular railway, with the mischievous tendency to make the poor poorer and the rich richer. This personal system of tariffs produces absolutely the same effect as unequal taxation. As the beneficial results of competition are not obtained by duplicating lines, such additional routes are an evil rather than a good. The large expenditure of capital in creating the duplicate line might have been saved, since but very few railway corporations in the world have their road-bed taxed to their maximum capacity. The existence of the new line built for competition is in reality an investment of an enormous amount of capital to divide the traffic which the existing line is perfectly competent to carry, and results in the traffic being done at a very much greater expense for fixed charges than if the existing road had added to its rolling stock facilities and had been permitted alone to accommodate such traffic. When peace is made, rates are fixed so high as to afford a reasonable expectation of a return upon a very large amount of capital unnecessarily expended in the building of so-called rival lines. This has led to the general conviction that, for economizing capital and producing, through these instrumentalities of commerce and of trade, the maximum result for the benefit of society, it would be better were we to

start de novo; and instead of dealing with existing conditions, to transfer to a corporation a definite field for its operations, under strict supervision of its tariff rates, and to stipulate that the corporation shall not be interfered with as to the field so long as it keeps down its rate to a certain percentage of profit.

At almost every western point, whether in Colorado, Utah, or Arizona, we find railways just constructed, and running two or three trains a day, threatened with rival enterprises, which propose to divide between them the little traffic that there is, and to destroy the profitableness of the capital investment in the original line, so that in the end the business divided between them, at extortionate rates, is not sufficient to pay for operating expenses and fixed charges on both capitalizations. But we are not now called upon to deal with this question de novo, as railway development in the United States has proceeded to a point to make assignments of fields almost impossible of accomplishment through the instrumentality of legis-The railway companies themselves are beginning to discuss the expediency, as a matter of self-preservation, of coming to some agreement as to fields between them. This, however, will be extremely difficult to accomplish by voluntary action.

However faithfully existing railroad corporations may adhere to an agreement not to invade each other's field, the absence of legislation holding the railway corporation to a strict accountability as to charges within the field with reference to which, by common consent, it thus obtains a monopoly, makes such an agreement one that the courts would probably declare void as against public policy. It would, in reality, in the absence of such supervision and control, be a conspiracy against the public. That the railway corporations already discuss these questions, and begin to regard the occupation of a field as a right arising from the circumstances of the case in favor of the particular railway occupying it, is an indication that the railways themselves have abandoned all pretense of competition in the same sense in which that term is understood in private enterprises. practical consolidations rapidly proceeding under commissionerships like Fink's, will tend somewhat toward the solution of this problem, because it will enable the Government to deal with these corporations upon the basis of their dealing with each other, and at some day or another to practically appoint fields to conglomerate bodies of railway corporations in following out the line traced by their voluntary action.

EFFECT OF RAILWAY WARS

One of the peculiarities of railway competition is, that the unsuccessful competitor in a railway war, driven to insolvency, unlike the unsuccessful competitor in mercantile life who is driven into

insolvency, is not thereby driven out of the market. The insolvent corporation becomes in many respects a menace to the solvent corporation more formidable than it was in its solvent condition. It begins, in railway parlance, to "run wild" after its insolvency, being exonerated from paying interest upon bonds, or dividends upon stock. Being required to earn simply operating expenses, it carries on a war of rates with a recklessness that threatens to break the solvent corporation, fighting it into the same condition of insolvency. Therefore, during the active railway war of 1875-7, carried on between the New York Central, the Erie, the Baltimore & Ohio, and the Pennsylvania railroads, the more favorably placed New York Central Railroad did not dare to carry the war to a point which would drive its adversaries into insolvency, lest the insolvency of the Baltimore & Ohio Railroad, and possibly of the Pennsylvania Railroad, might threaten the solvency of the New York Central. The motive and the facility for combination are so great that combination will almost invariably take the place of competition; and railway managers and legislators must now recognize as a fact that the railways are not, and cannot, without the interference of Government, be subjected. within any period of time about which we need give ourselves any concern, to the law of competition to that degree that we may look therefrom for the same results as in other departments

of human activity, with any confident expectation of maximum results to society at minimum expense. The natural law of competition being inapplicable, the question of governmental interference, therefore, resolves itself simply into one of degree: how far is it expedient to regulate railways by the public? and that depends very much upon other questions to which in this country we can not shut our eyes.

POLITICS AND THE RAILWAY

As political machinery has, by a vicious party system which by no means can find its complete corrective in the rules of civil service reform, more and more insidiously divested the people of selfgovernment within the past generation, we are in a condition in which is presented the question, when we speak of governmental control, not whether the railways shall manage themselves, nor whether the people, through the Government, shall control their management, but whether the railways, banded together in organizations having at their head powerful, astute, intelligent, and somewhat unscrupulous men, shall, in affairs in which they have a large interest and in which they must pay some regard to public welfare varying in degree according to circumstances, manage those important trusts, or whether the politicians, equally unscrupulous and astute, but not quite equal in intelligence as banded together in party

machinery, shall, in the interest of those political organizations which represent even more remotely the public interests than the railway direction represents them, manage those important trusts for them. There are many important reforms, therefore, in our governmental machinery which must proceed contemporaneously with the transfer of power from the corporation management to public control before we can hope for any great relief from public control as compared with corporate management. It is, therefore, well to proceed slowly even in a proper direction until the machinery of government in the United States shall be emancipated more from the concomitant and attendant bossism, political corruption, and chicanery existing under our representative and party conditions. It must be admitted that the direction must be toward governmental control, but this imposes upon the people of the United States the duty of making its governmental machinery fit to exercise such control. Neither the State nor federal machinery is as yet in that condition.

PROPER BASIS OF RAILWAY CHARGES

Another important question which must be taken in hand with reference to railway management is to find some proper basis for railway charges. The doctrine which now prevails among railway managers, of charging the traffic all that

it will bear, the basis upon which its classification as well as its tariff rates depend, is monstrously unjust, and should be radically changed. It is true that the responsibility of a corporation for the carriage of a case of silks is greater than when it carries a bale of cotton. But the difference in the rate charged is not based upon the slight premium which would represent an indemnity fund for the losses that might possibly occur from the loss of the package, but the difference is based really upon the supposed profit that the merchant or jobber makes on a case of silk as compared with the bale of cotton, and that he can afford, therefore, to divide with the railway the larger amount in the general result. This makes this service differ from that of any other rendered under competition in society. What regulates prices ordinarily is the cost of production, not the benefit to the consumer. The laudanum that is intended to cure a toothache costs at the store of the druggist the same sum as the laudanum which is to save a life. The use to which the object is to be put, or the benefit conferred upon the consumer, does not affect the price. It is said by the railway manager, in answer to this position, that he must regard his traffic as a whole, and that, by reason of the greater value of these first-class goods and the higher charge which he can make on them, he is enabled to carry the lower priced goods at a rate at which they can be moved, and that, if he were precluded from charging the higher rate on goods as readily

handled, but which are much more valuable in money, he could not carry ores, coal, or stone at any such rate as would justify their transportation from place to place. There is force in this position, but not to the extent to which it is claimed, and in that respect intelligent investigation and careful governmental control will have to strike a mean which will be more just than the existing classifications, and so adjust the rates both to consumer and producer as to enable all classes of commodities to be moved without doing injustice to the railway corporation.

The application of the doctrine of charging what the traffic will bear substantially makes the railway corporation a special partner, without investment of capital, in every enterprise along its line. The extent to which unscrupulous traffic managers and agents can, for their private emolument, carry this power of enforced copartnership, and that this power is availed of, is exemplified by the fact that on comparatively moderate salaries these traffic managers within a very few years very often become men of great fortunes. . It is a power to which modern society has known no parallel since the days of the farmers-general of France, who, in consideration of a sum total paid into the French treasury during the corrupt regency of the Duke of Orleans, and the reign of Louis XV., obtained the privilege of having a section of France farmed out to them to tax at their own will. It is therefore absolutely essential.

with reference to transportation lines, that without thereby fixing absolute rates, severe penalties
shall be imposed by legislation for breach of the
public trust for personal ends, and also that
stringent penalties shall be imposed upon the
making of discriminations between persons of the
same locality. It is likewise the duty of the public
to see to it that some unit, whether car-load or
train-load, be established, upon the basis of which
all shippers shall be treated alike, and to place
the smaller shipper upon some basis of equality
with the larger shipper. The smaller shipper
should by law be permitted to avail himself, in
combination with other people, of the car-load
unit.

MAXIMUM CHARGES TO BE REGULATED

Maximum charges have, in the experience of England, been found to be almost universally useless. The economies in railway traffic arising from steel rails, improved road-beds, better gradients, the greater power of engines, reduced rates of fuel, and through lines obviating breaking of bulk, have been so great within the past fifteen years that any fair rate at one period of time becomes at any other period so excessive as to cease to be a criterion. Maximum rates, therefore, when fixed, must be so arranged as to be under the supervision of some tribunal commanding public confidence and authorized to exercise such super-

vision, and to be from time to time registered upon a lower scale with reference to cost of traffic.

SECRET RAILWAY TARIFFS

A serious grievance in relation to American railway administration arises from railway tariffs being secret, and subject to sudden changes or modifications. No tariff of transportation rates should be permitted to be changed, except upon previous notice of a considerable period of time. Even the lowering of a tariff rate produces at the outset as much financial and commercial disturbance as the raising of it does. It is said that the knowledge obtained by the officers of the Standard Oil Company in 1880, that the tariff rates on oil would be suddenly increased by the railroad corporations, gave to that combination a profit of several millions of dollars. Whether true or not is immaterial. It is possible for special favored private interests to be informed secretly of an intended sudden change of tariff on an important commodity. In consequence of that information, which necessarily changes the price of that commodity at the point of delivery or at the point of shipment, the making of a purchase or a sale in advance, based upon that knowledge, gives absolute certainty of a large profit, which is so much wrested from those who do not know it. an advantage which should not be permitted to remain in the hands of railway administrators to

make use of, either for personal ends or for the benefit of friends as they may see fit. A law, therefore, providing with great stringency that all tariffs shall be published for at least six months in advance, and that no modifications thereof shall be permitted during that time, is a necessity to avoid this mischief. Tariffs also should be published at every station, with classifications, so that every man doing business with the railway corporation should be permitted, at a glance, at every station either of delivery or of receipt, to compare his freight bills with the published tariff rates, and see to it that he is fairly treated. Every deviation from the tariff to a favored shipper should result in imposing upon the railway corporation that allows such a deviation the payment, to every other shipper, of a rebate based upon the lowest shipment made. This penalty would be so severe that there would be no longer any favored shippers, and it is right that it should be so, because, of all evils incident to American railway administration, that of personal favoritism has been the most shameless and the most mischievous. [These reforms have practically all been incorporated in the Interstate Commerce Act.l

SECRECY OF MANAGEMENT AND ITS EVILS

Another problem presented by the existing condition of the railways in the United States is that which arises from secrecy of management. This evil must be dealt with radically. One of the prime

motives for secrecy of management is the enormous advantage which at the present day it gives to the managers in the maintenance of their power. They alone know where the stockholders are to be found, and can therefore control votes by the knowledge of how to reach or buy them, thus perpetuating their control. Another motive is the advantage thus afforded for stock speculations. The board of managers, by keeping unto themselves the knowledge that their property is losing heavily in comparative traffic, can sell their own holdings and go short of the market, under circumstances which will yield them an absolute certainty of profit on the transaction. This gives them an enormous advantage over the community by depleting the pockets of the unwary, who find themselves saddled with stocks at high prices. bought months in advance of the public announcement that the road is in difficulties. The knowledge of rapid gains in the development of business likewise gives, so long as it can be kept secret, a like advantage in purchase of stock. This advantage has been exploited to such a degree in the United States that the investing public has become inspired with a general distrust for railroad stock investments. [Laws to meet these conditions have since been enacted.]

KEEPING OF TRUE STOCK LISTS

In the States of the Union and under United States laws the existing condition of legislation which gives the absolute control of corporate enterprises into the hands of majorities of stock, and which gives to such stock equal weight, lends itself to this species of management, and places the stockholders' interest, as well as the public, at the mercy of this class of railway directors. The majority of the holders of record at the time of the closing of the books of a corporation have. at the annual election, the power to elect the whole board of directors. As much of the stock of great railway lines in the United States is held abroad, and is not transferred on the books to the actual owners of the property, but remains registered in the names of the persons who had long before parted with all interest therein, there is, at the time of the closing of the books in a great many of these railroad corporations, a large fictitious holdership, ranging from one half to one eighth of the whole capital stock holding interest, and this fictitious holding frequently controls such election. Who are fictitious and who are true holders are, as a general rule, approximately known to the directors. The directors, therefore, can sell their real holdings at high prices, and can purchase at low prices the fictitious holdings or power to wield proxies, and thus, for the purpose of depleting the road, capture the railway, in which neither they nor the constituency that elected them, have This evil also can be a substantial interest. remedied by legislation. Severe penalties should be imposed upon any one, having no interest in

the corporation, offering to vote, or voting, either personally or by giving a proxy to vote, at any election of directors of such corporation. [This evil has been remedied by legislation in New York State as well as in other States.]

MINORITY REPRESENTATION

The severest blow, however, which could be dealt to corporate mismanagement would be the rigorous introduction of minority representation in boards of direction, which would make secrecy of management, as against the interest of shareholders, substantially impossible, and would prevent the possibility of the recurrence of some of the worst abuses which characterize their adminis-Suppose twenty directors were to be elected, the reform would consist in allowing each section of one twentieth of the stockholding interest to elect one director, by accumulating their votes upon a single name, or by distributing their votes for one or more, as they may see fit. This is the cumulative plan. Another is the preferential or list plan, in allowing each twentieth part of the constituency to elect one director, by preferences indicated on a ballot, in the order of the names as printed. When the first name has a quota sufficient to elect him, i.e., one twentieth of the votes cast, the ballot is counted for the second name, and so forth. The result of this system of minority representation would be to

make of the board of direction a reduced photograph of the whole constituent body, and make it impossible to capture an organization like a railway from the actual owners thereof. Any one of the numerous plans suggested for securing minority representation, if applied to corporate management, would successfully accomplish that The objection which has been urged to the adoption of minority representation in public representative bodies has no validity in corporate elections, as in corporations neither localities nor persons are supposed to be represented, but pecuniary interests only. It would better secure fair representation than does the English system of diminished value of votes in proportion to stockholders' interests, i.e., one vote for every share up to ten, an additional vote for every five others beyond the first ten, and one vote for every ten beyond one hundred shares; or, the classification plan, by which only a few directors of the whole retire each year; minority representation would give permanency in management, and prevent the swamping of the interests of the smaller shareholders. [In some States, such as Kansas and Missouri, laws have been enacted providing for a system of minority representation in boards of direction of railway corporations, but no general law on the subject has yet been adopted.]

PRO RATA TARIFFS

Pro rata tariffs are the refuge of people of little

thought on the subject of railway management. It is fair that for the haul or for the car-load alone there should not be permitted a higher rate for the shorter distance than for the longer, as it is manifestly unjust artificially wholly to wipe out and even to reverse the advantages of proximity to the market; but to arrive at anything like a just conclusion on this subject, it will be necessary for the railways voluntarily, or compulsorily through legislation, to make a distinction in their freight rates between what they charge for terminal handling and what they charge for the haul. terminal handling at a great market is effected on so large a scale that it can be done at very much lower rates for each particular package than the terminal handling at a way station. The cars are more likely to be filled than they are at way stations, so that a perpetual difference must exist in favor of the facilities of commerce which the great centres of activity produce. This would be represented by lower terminal charges for places like New York, Buffalo, and Chicago, than at the small way stations or hamlets along the line. And the haul would be proportionately much less, and justly so, from extreme points of concentration of freights to extreme points of market, because the whole train-loads would go unbroken straight through. On the other hand, it should not be permitted to be so much less as to invert the situation, and to make the more distant point more favorably situated to the seaboard than the nearer

point. [The Interstate Commerce Act has a provision to meet these conditions.]

Pro rata freight rates disregard the laws of commerce in that particular, and must therefore be receded from wherever introduced. On the other hand, we must not be blind to the justification which lies at the root of the demand for pro rata rates, i.e., the unrighteousness of inverting the natural situation, which is ordinarily done under the spur of a railroad war at competitive points, under the effect of which the intermediate localities, which are at the mercy of the monopoly power of the railway, must suffer the burden of the war. This can be remedied only by legislation, but in that particular care must be taken that the legislation shall not go too far, as in doing so it defeats its own ends, because it becomes impracticable to work under it, and the repeal of the law leaves matters worse than before the law was enacted, as the unsuccessful law is used as an argument against the expediency of any law on that subject. This subject is sought to be met by one of the provisions of the Interstate Commerce Act.]

DIRECTORS SHOULD NOT SPECULATE IN COMPANY'S STOCK

A director found speculating in the stock of his own road, either by purchase on margins or sales on margins, should be severely punished. The temptation to sacrifice the interests of the

road to subserve his stock operations is too great to be permitted to exist. The man who desires to speculate in the stock of his own railway should be required first to leave the board of direction; if he fails to do so, he should, on detection, be punished as a malefactor.

FICTITIOUS CAPITALIZATION

The fictitious capitalization of railroads in the United States is an evil more difficult to deal with. Many motives combine to create such fictitious capitalization. Some are justifiable, others are sinister. Take the case of a mining property. A prospector discovers a silver mine; he sells it for \$30,000 to a capitalist in the neighborhood. The property is not developed; the discovery may amount to nothing. It may also be worth millions of dollars. The capitalist, the first investor, spends a few thousand dollars in developing the property, and thereby ascertains that the leads open into a vein within the domain of the lines of the stakes. He has his ore analyzed, and discovers that it yields from sixty to eighty dollars a ton. He thereupon proposes to sell this property, and does sell it to a stock company, who capitalize the property at a million of dollars, pay him a hundred thousand dollars cash, and something less than half the capital stock, and with the remainder of the capital stock they supply the treasury sufficiently to develop the property. They find

some takers on the basis of a million; others on the basis of half a million; others on the basis of a quarter of a million; but, as it is possible that the mine may be worth a million of dollars by capacity to yield sufficiently to pay interest upon such a sum and to return the capital invested within a given period of time, there is no public wrong in such fictitious capitalization, unless it is accompanied by fraudulent pretenses. The injury, if any is done, is limited also. The individual has invested his money at an excessive valuation, and there is an end. Railway corporations are, however, organized upon fictitious capitalization upon a different basis. A line from one point to another, say a distance of a hundred miles, is surveyed. It is ascertained that it will cost about \$15,000 a mile to build, including acquisition of land, and about \$5000 a mile to equip; a total of \$20,000 a Application is then made for town and county aid, which aid is generally represented by investment in the stock of the road. The first purpose is to give as little as possible in the way of value in return for such money aid, and it is, therefore, necessary to interpose between the stock and the property a sufficient number of mortgages to make the prospective value of the stock of little or no value. A construction company is then organized, which takes the town and county aid as part of its capital, and the railway corporation, instead of making its contract upon the basis of cash, issues to the construction company, say

first mortgage bonds of \$20,000 a mile, or possibly \$25,000 a mile; second mortgage bonds of \$20,000 a mile, and stock of an equal sum, making a total capitalization of \$65,000 a mile, instead of the \$20,000 a mile at which the road could be constructed. The construction company is composed generally, directly or indirectly, of the officers of the road and their friends, who build the road upon the basis of cash obtained by negotiating through bankers the securities represented by the bond issues of the railroad company; they acquire the stock for little or nothing, and also frequently a large proportion, if not the whole, of the second mortgage, and in prosperous times they may succeed in building and equipping the road on the issue of the bonds secured by the first mortgage alone. By this system the road comes into existence laboring under the necessity to earn, over and above operating expenses, interest on a funded debt, about double the cost of the enterprise, and, if possible, to earn dividends on the stock beyond that sum. That this rate of earnings has been accomplished in the United States to a very considerable degree is an illustration of the remarkable development which the country has experienced in every direction during the past twenty years, and is an illustration, likewise, of the enormous growth and progress of all material interests which have taken place, because this mode of stock and bond issue is the all but universal rule with reference to the construction of new lines in the United States.

THE EXCUSE FOR FICTITIOUS CAPITALIZATION

The excuse made by railway builders for this course of proceeding is that upon the basis of an ordinary profit no one would undertake the extremely hazardous task of introducing railways into new territory. The peculiar risks incident to such an enterprise are that if the traffic fails to come they lose their money, and if the traffic develops they are in imminent danger of being immediately compelled to divide such traffic with some rival line; and that, therefore, they must find the return of the capital and their profit, not in waiting for the development of the business, but in selling bonds and stock to the investing public upon a basis of fictitious value. So long as investors purchase, without proper investigation, this class of securities, it is difficult to see how they have any ground for complaint; as the mode of manufacturing these securities is sufficiently well known to be a matter of public notoriety. As to the people at large, however, the effect of this fictitious capitalization bears a different aspect. It is true that the cost of a road and its capital account have but little to do with the rate at which it is required to carry to and from a few competitive points. It has, however, very much to do with the fixing of the local rates, and is a constant incentive to increase the rates for the purpose of paying interest and return upon all the capital issues of the road. For the state to interfere and

absolutely forbid any false capitalization, which is, in other words, the anticipation in the capital account of the development in time of the traffic, would probably interfere considerably with the undertaking of new railroad building, unless such interference and prohibition are accompanied by some guarantee of the field.

The two evils, unrestricted competition in railroad building and false capitalization, hang Were railway projectors sure that a together. certain territory would be left in their possession until they could receive a return of the original capital and a reasonable percentage on the outlay, there would be no reason for continuing the incentive to false capitalization in railway construction. so that the promoters, by means of this quasifraudulent element, can immediately obtain a return and profit for the outlay of their money: they could then contentedly wait to receive an adequate return for their money upon the basis of a capitalization bearing a close relation to the actual cost of the construction and its equipment. Justified as is the opposition to stock watering. both on the part of the investor and on the part of the public, the reform of this evil can only be safely entered upon, and so as to avoid materially checking new railway enterprises, with a concomitant change in the policy of state and national governments. The fact must be recognized that railway construction cannot be left absolutely to free competition, but is a trust which should be given with

circumspection, and, when given, surrounded, first, with guarantees to the state and to the people that the men who undertake it will faithfully perform their trust, and secondly, with guarantees from the people and the state to the *entrepreneurs* that they will permit them for a given number of years undisturbed (under limitations as to charges) to obtain the advantage of the traffic development which their enterprise has created, without incurring the danger of being compelled to divide such traffic with another organization entering upon the developed field not to render additional services to the public to be served within its line, but simply to take away from and divide the income of the existing road.

There is no question that the system is entirely vicious, but it is a system that has its roots in the false view with which the public has regarded railway enterprises by considering them as private enterprises instead of public ones, and therefore has given a basis for the railway speculators' point of view, that it is their business, and not the public's, at what rate they shall see fit to capitalize their roads; and, as the public gives no care to protect the railway constructor in his enterprise, the railway builder, in his turn, imagines that he owes nothing to the public in that regard.

Mr. Poor, in the introduction to his *Manual* for 1883 (and he speaks from the railroad point of view), cannot but admit "that the increase of share capital and indebtedness of the railroad

companies for the three years ending Dec. 31, 1882, was \$2,023,646,842, the average cost per mile of the new roads being in round numbers \$70,000." He estimates that the cash cost of all the railroads built in the United States in the last three years did not exceed probably \$30,000 per mile, or \$900,000,000 in all. He estimates therefore, that more than half of this enormous capitalization is entirely fictitious. He says, with great frankness: "Of course such an enormous increase of liabilities over cash outlay is to be greatly regretted, and is well calculated to create a distrust of all securities, good and bad."

TELEGRAPH RIGHT OF WAY ON RAILWAY ROUTES

There is an abuse connected with railway administration which requires legislative remedy—the granting of the right of way for telegraphic purposes at the same time with that for railway purposes. With every extension of an old railroad or the building of a new one, the Western Union Telegraph Company is ready to step in and stretch wires for the new corporation or line, under a contract that the railway company gives to the Western Union Telegraph Company the exclusive right to maintain the telegraph service to the towns and stations along the line, in consideration of which the railway company can, for its purposes in the management of its road and in the dispatching of its trains, use the telegraph line thus built. This

gives to the telegraph line a free right of way; and, as the railway in all territory west of the Mississippi and south of the Potomac is in reality the main line of travel, and as along its line towns spring up and population congregates, it gives to that particular organization an enormous advantage over its competitors and all new organizations, inasmuch as it not only gives a free right of way along the line of the railways, but an exclusive telegraphic service in connection with the railways. This abuse, which as yet has scarcely attracted public attention, came to the surface only during the recent controversies in relation to the stock waterings and acquisitions of rival properties by the Western Union Telegraph Company. This is also difficult of remedy without legislation recognizing the monopoly character of railroad and telegraphic enterprises, and should, if permitted hereafter, be allowed only on condition that such field may be secured in consideration either of lower charges to the community, or by providing some species of sinking fund by which the community shall ultimately acquire the property.

FUTURE OF RAILWAY QUESTION

This brings us to the final consideration of what is the probable future of the railway question in the United States. The railways now [1883] represent an aggregate capital of something approach-

ing \$7,000,000,000. A considerable proportion of that total capitalization is in the hands, or largely under the control, of less than one hundred men, who are not the highest type of modern civilized life. After giving them credit for business capacity, shrewdness, and intelligence, there are still lacking some elements of character which are created by living up fully at all times to contracts, the basis of the modern social organism. Unlike increase of capitalization in any other business, increased capitalization in railroad enterprises does not increase the number of great capitalists engaged in the business, but has a tendency to decrease it, because amalgamation and consolidation proceed with greater rapidity than extension of mileage. Compared with the power represented by this vast aggregate of capital, the power and the influence of nobility in any civilized community are small.

One of the arguments in favor of a great national indebtedness at the time when it was in process of growth was that, though unfortunate for the country to be compelled to roll up so large a debt, yet it had a counterbalancing good, inasmuch as it interested vast numbers of people in the success of the government and in its stability by the pecuniary interest of the bondholders. As the indebtedness of the United States was, at its very highest, less than one half of the aggregate capital now represented by the railway interest, it is clear that there is a larger pecuniary interest on the side

of the railway to-day, arising from capital investment in its obligations, than there was at any time on the side of the government. Railway capital is now [1883] four times the amount of the public debt. In any contest, therefore, between the government and the railway enterprises, it is clear that, so far as mere pecuniary interests are concerned, the railway enterprises largely preponderate. Adding to this the circumstance of the concentration of this great railway power in comparatively few hands, the extent to which they can corrupt the commonwealths is practically limited only by their will.

At the time of the institution of the Government of the United States and of the various States. European governments were great monopolies in the hands of the few. From the corrupting influence of a like power American statesmen sought to shield the American people. Governmental responsibility and prerogatives of executive power, instead of being centralized, were diffused and split up, and to a large extent sacrificed, for the purpose of creating a larger degree of individual freedom. The governments of the States of the Union were therefore loosely put together, so that public opinion could break through at any point and influence them. Permanent large ownerships of land, titles of nobility, special privileges and great accumulations of capital were guarded against by abolishing the right of primogeniture, of patents of nobility and of accumulations. The

corporation was but little extended, because credit was but little developed at the time of the organization of the United States Government. Hence it was not observed that some of the evils which were thus carefully intended to be guarded against, such as primogeniture and accumulations, were allowed to come back in more aggravated form through the perpetual existence of the corporation, making a continuous increase of capital accumulations possible through its instrumentality, with the aggravating circumstances that, instead of those vast properties being in the hands of individuals responsible for their right conduct in their individual capacity, and distributed by the natural process of death into a greater number of portions, the great accumulations and vast possessions of modern times are under the control of boards of directors having less immediate responsibility than the individual to legal influences, and being less governed by considerations of a social character properly to administer their trusts. The United States Constitution and the constitutions of the States contain provisions against unjust taxation by carefully worded provisions that taxation shall be equal. The amount collected for freight and passenger traffic in the United States by the railways of the United States in 1882 was \$770,000,000. an amount double that of the revenues of the United States Government. Every dollar of this, as to mode and manner of expenditure, is in the hands of boards of directors, with scarcely any accountability to the public, and but a very remote one to their own shareholding interests.

In every presidential election for the past twenty years the railway corporations have taken an important part. In the election of governors in the various States and in the formation of the State legislatures, in influencing appointments of committees, they play a significant rôle, and one which is scarcely any longer disguised. They do this avowedly on the theory of self-protection; but no irresponsible body ever stopped short at self-protection, because the power which enables them to protect themselves against aggression is likewise a power which may be wielded in aggressing upon the rights of others.

The mode and manner of the collection of this revenue is not yet amenable to public control in the United States, and yet the cost of transportation more closely resembles taxation in all its incidents than any other method of receiving return for services in the industrial world.

When the railway corporations, under the administration of Mr. Fink, in July, 1882, raised their rates on west-bound freight from New York to Chicago, from forty-five to sixty cents per hundred pounds on first class, from thirty-two to fifty cents on second class, from twenty-six to forty cents on third class, and from nineteen to thirty cents on fourth class, every commodity transported from New York to Chicago had this additional tax imposed upon it as part of its cost

It is, therefore, of at least as much importance to a community to be fairly and equitably dealt with in its cost of transportation as it is to be fairly and equitably dealt with as to taxation. unfairness and injustice in the cost of transportation bring about the same disastrous consequences to individuals and to classes as unfair and unjust taxation does. It is, indeed, a mild statement of the case to say that the injury inflicted by the unfair cost of transportation is as great as that inflicted by unequal taxation, because the mischievous consequences of unfair or unwise transportation rates are necessarily greater than those that arise from unequal taxation, and dry up the prosperity of a community more rapidly than do bad taxing laws. Therefore, carefully worded constitutional provisions designed to protect the community from the evils of oppressive and unequal taxation by government, while leaving this great and growing power of private taxation without responsibility to government in its administration, are analogous to guarding the public against the ravages of the wolf, and leaving it unguarded from the attacks of the tiger.

That already the legislative bodies of the States of the Union are as wax in the hands of the modeller

under the manipulations of these great corporations, is a truth which the people have been made to feel in all the more densely populated States, in the North and in the East. How to get back their control, and yet not change it into a control of a very dangerous character, by adding the supervision of the expenditures of the enormous revenues of the railways to the supervision of the enormous revenues of the United States, and of state and local administrations, administered as they are in the main by politicians not much, if any, above the status of the railway magnates, is probably the most serious problem which, since the abolition of slavery, has confronted the people of the United States.

There is much keen perception and wisdom in the way Professor Sumner puts the relation of the Government to the people in the United States, when he says that the Government, in the abstract, is all of us, and, in the concrete, some of us, who, by accident or chicane, obtain control, those some of us being not the best of us, and that, therefore, it always becomes a serious question what these some of us should be permitted to do for all of us. Therefore, no heroic measures can, in the present aspect of political conditions in the United States, safely be entered upon. These very political conditions suggest a possible point of view from which we can regard this powerful imperium in imperio of the aggregated railway corporations as something other than an unmixed evil. The corruption

of our political machinery has proceeded almost simultaneously with the growth of the railway corporation. As the basis of civilization, the security of capital is certainly of as much importance to a community as its form of government. Peoples have become civilized, and have enjoyed a certain degree of prosperity, under forms of government other than our own. No community can enjoy prosperity, or attain any high degree of civilization, where property rights are not secured. Property protects itself best from aggression or unjust tribute when it is congregated under corporate management, in few hands, because it becomes, in its centralized form, capable of wielding a power which the politician is bound to respect. Under the corrupting conditions of existing administrations, it has, perhaps, been one of the modes of preserving property from the grasp of those who, in national, state, and municipal governments, represented public power ostensibly, but really represented their personal interests first, and placed party caucus and boss interests in the second rank. In the long run, however, this condition becomes intolerable. community can safely pursue its course of happiness and well-being where the actual highest power wielded in the community is not responsible to the people, where its government is a mere simulacrum, and all real power is moulded behind the throne by a moving power. It is just as objectionable if this moving power be a band of railroad

directors who move the government, as that it should be the mayor of the palace, a church institution, a cabal of courtiers, or loose women. Against such an insidious power the ballot is ineffectual, and even revolution almost hopeless.

It is, therefore, essential, as a necessary part of the solution of the problem before us, that the people of the United States should awaken to the fact that their methods of legislation and their methods of selecting legislators, their political organization and political administration, must be reformed as well as the railway administration, and that the amenability of railways to the public is very largely dependent upon such reform in political administration. The civil service reform is already a step in the right direction, and its permanent establishment will make thoughtful investigators on current events less fearful of clothing governments, both state and national, with the additional powers necessary to cope with the railway problem. The other more important reforms, however, are those of methods of legislation and representation. [On these subjects separate monographs by the writer have been contributed to the Cyclopedia of Political Science, Political Economy and United States History. edited by John J. Lalor. See the articles "Legislation" and "Representation."]

The people must concede, once for all, that the line of policy as to railway management has proceeded upon a mistake. They must recognize the

fact that in all services, the supply of which is limited to a certain locality, and which, as to such locality, can practically be indefinitely increased without proportionately increasing the plant, there is a monopoly character implanted upon such service, whether it be the supply of ways and means of transportation, of gas, of water, of electricity, or of motive power on some general plan, which takes these enterprises out of the domain of competition. and compels a treatment separate and apart from that of strictly private enterprises. Some modification must be made, limiting the existence of corporations, so that from time to time something analogous to the service that death performs in the individual world shall happen to their accumulations and power. Some plan should be provided, by way of sinking fund, or gradual acquisition by the Government, by which enterprises of this character shall in time become the property of the State. Such a plan of compulsory sinking fund to repay capital must, of course, in all cases be accompanied by some guarantee against invasion of the field by other organizations; and, as Mr. Fink observes, in his answer to inquiries of Mr. Nimmo, in his report for 1878: "In the consideration of this subject one important fact should always be kept in view, to-wit, that the effect of the construction of a greater number of railroads than are necessary to accommodate the traffic is to increase to a great extent, not decrease, the cost of transportation. The interest on the cost

of two roads built for the purpose of transacting the business that could be transacted by one, and the cost of maintaining the two roads, are of course twice as much as the interest and the cost of maintaining one road." The interest and cost of maintaining a road, he estimates as from 40 to 60 per cent. of the whole cost of transportation. follows, therefore," he continues, "that for every additional road built for the purpose of transacting the business that could be accommodated by the road already built, the cost of transportation is increased from 40 to 60 per cent." This truth borne in mind would enable the Government to give practical control of the field, without thereby adding to the cost of transportation. It could at all times annex the condition that no more than a certain percentage of profit shall be earned, and that out of this surplus a sinking fund shall be provided, to repay capital outlay, and that, when the cost shall be repaid, the road shall become public property.

We are very far yet from this solution. The course which is likely to be run in the United States in regard to the railway problem is the extension of the commissioner system by State legislation and its adoption by the federal government. A mass of light thrown through the investigations of these bodies upon the subject will make matters appertaining to railway administration more generally understood by the people of the United States. And, by the time the railways are

ripe for more heroic treatment of the question, the people in all probability will also be ripe to treat it more intelligently, and will have made such progress in the moral development of the administrative machinery of the government that the additional powers to be intrusted to that machinery can safely be delegated to it by the people.

CHAPTER III

[As a supplement to the foregoing, the following paper read by Mr. Sterne before the Wharton School, University of Pennsylvania, November 27, 1895, on "The Relation of the Railroads to the State," is illuminating, as showing the state of opinion on the railway question at that date and the effect of the passage of the Interstate Commerce Act. The opinions then expressed are pertinent even now. Mr. Sterne's remarks were printed in the Citizen, the journal of the American Society for the Extension of University Teaching, and are here given as delivered before the Wharton School.]

THE RELATION OF THE RAILROADS TO THE STATE

One of the wittiest of our writers has said that in youth we build ladders to the moon, and in mature years we take these ladders down and are content to use them as wood for a cowshed.

Twenty years ago [1875], when the manifestations of the evil of private railway administration had reached their maximum point, it seemed to me that there was much to be said in favor of the opinion, then prevalent among those who had given serious thought to the question of railway administration, that there was another way out

of the difficulties that then environed us than the taking over of the railways by the State. Since that time the railway system of the United States has so vastly increased in volume and value that. from the mere bulk of the sum involved, such a taking over has ceased to be a practical idea. Many evils that then existed have, under civilizing influences without legislation, and under legislation due to such civilizing influences, been so ameliorated, if not abolished, that the pressure for drastic changes has been relieved; and it has become generally recognized that a state administration of the railways by an actual acquisition of the system must be relegated, in the United States, to the limbo of discarded ideas, probably never to be urged again. In the earlier history of railway enterprises all the charters contained a provision for their purchase by the State within a certain time and upon a certain basis. But no effort has been made in any of the States of the Union to make use of the opportunity thus presented. The drift of thought had taken a wholly different direction. Competition—free field and no favor-was regarded as the antidote against monopoly; and under the stimulus of general laws which enabled any given number of persons to file, at nominal expense, in a public office, articles of incorporation to run a railway from any point to any other point, and, quite independent and irrespective of public necessity—which it was supposed would be gauged by the self-interest of

those who undertook the enterprise,—railway projects, and railways as a fact, increased by leaps and bounds in the United States, and to an extent far surpassing their development in any other country. From decade to decade tens of thousands of miles were added to the railway system which increased from 9000 miles in 1850 to 30,000 miles in 1860, to 52,000 miles in 1870, to 93,000 miles in 1880, to 156,000 miles in 1890, and to about 170,000 miles in 1895. Statistics vary about this latter figure, but for the purpose of the suggestion that I make, a mere matter of 5000 miles is of no great consequence. What I desire particularly to draw attention to is that the Statesman's Year Book of 1895—the most authoritative general statistical compendium in the English language—gives the total mileage of railways for the whole of Europe at the beginning of 1894 as 148,174 miles. We should, therefore, in relation to any suggestion of taking over the railway systems of the United States by the State, on the theory that the State is the normal roadbuilder and that its highways should be in its own possession, be compelled to deal with railway systems larger than those of the whole of Europe combined, and with an amount of capitalization considerably upwards of \$11,000,000,000. A system of government designedly so loosely put together as that of the United States, which never was intended to supplement private energy but simply to protect the lives and property of its

citizens and to leave them largely free to look after their own development, is not, from the nature of its organism, the character of its institutions. and the requisite amount of power which is wielded by it, in the least adapted for the control of such an enterprise, which represents the largest single investment of values in the whole country. Bulk alone, therefore, as I have stated at the outset, remits all suggestions even of ultimate acquisition of the railways by the State to the realm of chimerical and scarcely academic theories. We must look, therefore, in an entirely different direction for regulation (we can scarcely speak of control) of a power which has outstripped all other single interests, and upon the prosperity of which a very considerable proportion of the prosperity of the whole nation depends.

In this connection let me give a slight sketch of what has been done in other countries.

In France, every cession of the main lines was limited to fifty years, within which time the lines were to be permitted to remain in private hands, the state having power to take over at an expert valuation their rolling stock and improvements. Yet, although the fifty years have elapsed, no effort is being made by the French Government to act upon the right possessed, but, on the contrary, the influence of the railway magnates and the state of French finance have been sufficient to prolong the time of cession and to make the conditions of acquisition additional burdens upon

the state in the event of its ultimately taking over the properties of the great radiating lines issuing from Paris and going to the uttermost ends of France.

Stimulated by the example of Prussia, France undertook, shortly after its recovery from the effects of the war of 1871, to build state lines, but even there the possession of the private lines made itself felt so strongly that the French administration had to content itself with building what is known as *vicinal* lines,—small connecting lines between the main lines or transverse lines, running from east to west instead of radiating through the territory,—which have but a limited business and do not pay a reasonable percentage upon the capital invested. So that until 1890 the proportion of private lines to state lines was 93 per cent. in the hands of private companies and only 7 per cent. in the hands of the state.

Italy allowed its railways to be built, in the main, by private enterprise. In all that territory lying north of the southerly line of Lombardy, and in part of Tuscany, which were for many years under the control of the Austrian Government, the railways were governmental property, while the railways south of that line were the property of Italian industrial companies. When North Italy fell into the hands of the Italian state, after the Franco-Austrian-Italian war, the North Italian lines became the property of the state. That being the more highly developed part of Italy, the

state itself constructed additional lines, so that by the end of the year 1889 about 60 per cent. were owned by the state and about 30 per cent. were under the mixed control of the state and private ownership, and only about 10 per cent. in the hands of private owners. The Italian Government by that time had become so hampered and harassed by its ownership and state control that it felt called upon to re-let the major part of its own railways, placing them in the hands of private individuals, for their traffic development and operation.

Germany has pursued since 1872 a wholly different course. In that year it began to purchase, mainly for military reasons, the railways of the state, so that in 1891, in the whole of Germany, less than 10 per cent. of the railways of that coun-

try were private enterprises.

Austria-Hungary, under the influence of the example of Prussia, pursued the same policy, so that the state, at the end of the year 1891, owned 32 per cent. of the whole of the railway system of Austria. The state had leased about 12 per cent. additional and left, therefore, under the control of private interests about 56 per cent. In Hungary, at the end of the year 1891, the state owned and leased 81 per cent. of the railway system, leaving as private enterprise about 19 per cent.

In Belgium, the railways are all owned by the state.

In the Netherlands, 58 per cent. of the railway belonged to the state in 1891, and about 42 per cent. were in the hands of private individuals.

In Russia, 36 per cent. were in the hands of the state in 1891, and about 64 per cent. were private interests. But this proportion is rapidly changing because, since that time, the great transcontinental railway has been undertaken by the Russian Government, which, traversing the whole of Russia in Asia, will change very considerably that proportion in favor of the state.

In Roumania and Servian Bulgaria, the state expropriated the various private railway enterprises and, since 1890, has owned them all. In Portugal, about 38 per cent. are in the hands of the state and about 62 per cent. in the hands of private enterprise. In Spain, Switzerland, and Great Britain, all the railways are in the hands of private enterprise. The governments of the Australian Colonies, on the other hand, are the owners of their own railway systems. [The various changes for these governments have already been noted in the previous pages and the condition of affairs shown, according to the *Statesman's Year Book* for 1910, and need not be repeated here. The arguments are still pertinent.]

There is, therefore, an immense field of comparison for the purpose of ascertaining which of the two systems is the better for the development of a country, or whether the mixed system—in part private ownership and in part ownership by

the state—is the one which results most satisfactorily.

The advantages, which have developed mainly in Prussia, of a system of state ownership are, first, a unital tariff system organized with absolute rigor and without deviation and wholly in the interest of the community; secondly, the capacity to build with the proceeds of loans bearing a low rate of interest, the principal of the obligation yielding in proceeds par and above for the purposes of the railway; thirdly, the construction of lines to develop traffic in certain sections of the country, without reference to immediate returns; fourthly, the entire abolition of the frauds and wrong-doing incident to railway finance, where such finance is not subject to governmental control or governmental supervision; fifthly, greater freedom from accidents due to the very great development of a unital schedule of arrival and departure of trains, having reference to strict connection with other lines and entirely free from the competitive annoyances to which such lines would be subjected if they belonged to rival systems, as they would under private ownership; sixthly, prompt repairs of highways and maintenance of roads, arising from the fact that there is no fund belonging to bondholders or stockholders which is jeopardized by such application of the income of In other words, the state, being ready the roads. to make up any deficit from the earnings of the railways, arising from the necessity of maintenance or the adoption of some additional new system of operation, can promptly devote the income of the road, or more, if necessary, to the betterment of the property for such purposes.

The disadvantages of the system are that it is not developed in the community solely with reference to politico-economic considerations or business considerations, but all other conditions are equally considered, to determine upon the development of any extension of the growth of the lines,—such as military considerations, or, as it might be in this country, political considerations favoring a particular locality or district. Besides, the development of the system is wholly conditioned and dependent upon the financial condition of the state, and, if any untoward circumstance happens to the state's finances, the development of important industrial transportation is checked and most injuriously affected. Of course there is also a great tendency to increase offices beyond an absolute necessity when the railways are in the hands of the state, and there is the vis inertia of state control, as against individual initiative, with reference to the adoption of improvements.

The political independence of a community which is made to rely upon the state for this great service, so essential to its welfare and progress, is also somewhat impaired; and the personnel of railways is not so apt to be considerate of private interests when the holders of positions are wholly

independent for continuance in office of the treatment meted out to the community. It has been demonstrated, however, that there is no gain in the cheapness of the service of transportation by its being in the hands of the state. It is claimed, and I believe with justice—indeed it seems to be indisputable—that the freight tariff rates for long distances in the United States are lower than they are anywhere else on the face of the earth; that economies in transportation have been carried to a higher degree of perfection, and, though the general road-bed and superstructures are not as a whole as good in this country as they are in European countries, the traffic arrangements are, on the whole, vastly superior.

The mixed system, such as prevails in the Netherlands, has resulted in a controlling influence upon railways in private hands exceedingly oppressive to them. They are practically run in opposition to a system not dependent upon income for maintenance. In this way the mixed plan operates very much, in regard to the private lines, as the rivalry of a bankrupt road does upon a solvent one. It has a tendency to drag the solvent road into insolvency, because the insolvent road, being emancipated, for the time being, from paying interest upon its bonds and dividends upon its stock, "runs wild" with reference to its freight rates and simply captures business where it can. Therefore, though publicists point with some degree of satisfaction to the lowering of the rates which the mixed system has produced in the countries of Europe where it has been introduced, the opinion of the railway officials of the private roads is almost unanimous that such a system becomes, in the end, intolerable and must either result in total ownership by the state, or in the total abandonment by the state of its railways, placing the leases of them in private hands.

If we come to the conclusion, as it seems to me is inevitable from what has preceded, that the. ultimate taking over by the state of the railways is, so far as we are concerned, wholly to be abandoned, then the duty on the part of the state to exercise some degree of supervision of the management-and, if some degree, what degree?-becomes a most pertinent and instructive inquiry. As a result of the entire absence of state control. the whole state machinery was in some States of the Union under the domination of the railway interests, and it was with extreme difficulty that the most flagrant and manifest abuses could be rectified. For many years the State of New York was in such a condition. The State of New Iersey was in such a condition, and even the State of Pennsylvania was not entirely free from a certain degree of domination by railway interests. the newer States of the Union, particularly in our far western States, where values of many millions of dollars had been, through subsidies of large tracts of land, granted to the railways,—and many other millions of dollars had been subscribed by

counties and towns, much of which was wasted and lost by reckless adventurers without producing to the communities a fair proportion of the mileage of the railways for which they had subscribed, and which they had subsidized,—a very bitter feeling was engendered against the people who had control of the railway enterprises, and the consequence was ill-considered, unwise, and dangerous legislation. The demagogue denounced this great useful instrumentality of commerce as though it were a tyrant, extracting by a process akin to taxation the values of the State and Territory through which the tracks were operated, instead of being the instrumentality that gave value to the land and its product.

The abuses that were incident to the financial administration of the railways, and to the manipulation of the tariff rates in making local and personal discriminations, were seized upon as illustrations of the normal manifestation instead of the abuses of the system; and statute after statute was passed allowing arbitrary and inconsiderate interference with railways, without due regard to the relation of the railway within a particular State or Territory to the whole network of railways throughout the United States. This had to be undone, after evils almost as great as those that had been produced by the railway speculator and manager had been created in their turn by the demagogue and rural statesman.

Our American communities, one after another,

had to learn the lesson "not to pour out the baby with the bath water"; and it was not until the enactment of the Interstate Commerce law, the inquiries preliminary thereto, and the organization of the Interstate Commerce Commission that an intelligent and comprehensive effort was made to secure a unital and intelligent system of control, based upon facts as well as upon theories, and preceded by a knowledge of some of the evils which were intended to be cured.

In the first place, it was recognized that the ordinary courts of justice could not deal, and were not in a position to deal with the questions of discrimination and unfair, local, or individual preferences, which had become one of the main elements of injustice and wrong practised by the railways. Therefore, a specially constituted tribunal was called into being, which, though not originally composed of experts, rapidly became so by exclusive devotion to the administration of one law. Its application of this law to the facts of the railway world had an educative influence upon the men themselves, who were called upon to administer the law, as to the points of view and the technical data which went to make up the railway charges, railway rates, and the elements that govern the question of rate-making, either for the transportation of persons or of goods. That there crept into the law traces of the older legislative conditions, as, for instance, reliance upon competition to regulate rates, etc.—survivals of the

Granger laws—is a matter which was to be

expected.

The Interstate Commerce Act forbids, as rightly it should, all preferences under like circumstances and conditions in the rates to be charged for the transportation of persons and goods in the same direction from one part of the country to the other. It circumscribes and defines the field over which the Interstate Commerce law is to operate, gives to the Commissioners the power of investigation and determination, but unfortunately has left the enforcement of its findings to the ordinary judicial tribunals, which have claimed to themselves the right of an independent investigation with reference to the correctness of the findings of the Commission. This to so great an extent paralyzes the function and power of the Commission that, at some near day, an amendment to the law must be had to remedy this defect.

The law seeks to prevent any pooling, either directly or indirectly. This was a concession to the ultra-radical school of those who had unearthed evils as they existed prior to 1887, and who thought they saw in pooling an effort to maintain rates beyond what was fair, and therefore to extract from the community an unjust tax for the service of transportation. It has been ascertained, however, that the evils of uncertain, fluctuating, though low, rates of transportation are greater than those of higher and certain rates of transportation, and that a community can better afford

to pay a high rate of taxation, provided the incidents and burdens of taxation are evenly distributed, than a comparatively lower rate with such incidents and burdens badly or unevenly distributed. Therefore, many of those who have advocated this inhibition of pooling have been weaned by the experiences of the last eight years from their ideas on that subject, and there is now a general consensus of opinion that pooling, under the supervision of the Commission and subject to its consent, should be permitted; but that it should not be done unless a schedule of rates, as well as the agreement to pool, and the changes that the pool will make in the rates, are simultaneously submitted to the Commission when the contract to pool is submitted. There is also an inhibition in the act against charging more for the shorter than for the longer haul, with power to the Commission to suspend the operation of the act when good cause is shown. In some respects that clause will have to undergo modification. This point is too involved, however, for a paper of this character, but it has become clear that the exigencies of commerce must, in due time, make the exception almost the rule, as to the observance of that part of the act; yet it is manifestly unjust to leave a territory which is absolutely under the control of a single railway—the railway's short haul being the local territory generally circumscribed by the lines of the State—to be taxed as the railway sees fit, in order to allow it to make up its losses incurred in railway wars, when it chooses to carry through long distances at ruinously low rates, by an extortionate charge to the local territory. A nice adjustment of this difficulty requires all the statesmanship and all the calmness and deliberation of which we are capable.

There comes next in order what has not as yet been attempted—some control of the financial affairs of the great railway corporations, -not a control of their finances in the sense of preventing issues of bonds and stocks and allowing their sale at whatever prices people are willing to pay, but to give some assurance that the affairs of the corporations are honestly managed. That can be done only by a system of public audits of the finances of railways. A step has already been taken in the right direction by the additional power given to the Interstate Commerce Commission, not only to make investigations of its own motion whenever it sees fit but to prescribe a unital form of railway accounts. When that shall be generally conformed to, and additional strength and power are given to the Interstate Commerce Commission, the next step will be to provide for a public audit of such accounts, which is essential to prevent scandals, and therefore losses, like those which have attended the administration of such properties as the Atchison and Reading railroads.

Within the twenty-five years that I have been an active participant in the effort to eliminate the evils incident to the administration of the rail-

ways of the United States, an extraordinarily marked advance has been made for the better in such administration. Gross forms of personal and local discrimination are no longer possible. When I conducted on behalf of the Chamber of Commerce and Board of Trade of New York, in 1879, the investigation which is known as the work of the Hepburn Committee,—which sat for eight months and took testimony comprised in five huge volumes which are probably to be found in the library of the University of Pennsylvania. the local freight agent in the City of New York of New York's leading line of rail—the New York Central & Hudson River Railroad-admitted that there was no such thing as a tariff for the whole of the local freight, carried over that line within the State of New York, when moved in larger quantities than single packages; that every rate was a special rate, varying according to circumstances and conditions; and, when I tried to probe what these circumstances and conditions were—whether there was any rule which governed the rates that were fixed,—it was impossible for the freight agent to fix any such rule or to state the proposition in plain language. In other words, a man would get one rate one day for the transportation of goods from Rochester to New York; he would get another rate the next day; and his neighbor would get a different rate for the same goods, shipped under the same circumstances and at the same time. Of course, the monstrous in-

equalities which arose from this condition of affairs—inequalities sufficiently great to make one man prosperous and drive his neighbor into bankruptcy—are altogether things of the past in the State of New York, and also, I venture to hope, throughout the United States.

In the same investigation, it was discovered that a single flour-mill at Niagara, during the extraordinary contest for freight between the various railway companies—which pulled down the freight rate on flour from Minneapolis to New York to ten cents a hundred—had continued to work, and ship its flour to New York from Niagara when every other mill within the limits of the State of New York had been compelled, under the pressure of this competition, to close its doors. was claimed that this Niagara mill had machinery equal to Minneapolis mills, while the other mills were antiquated concerns. Not satisfied with this explanation, the probe of cross-examination disclosed a private contract which gave to the proprietors of that mill a pro rate of the Minneapolis rate, whatever it might be, and therefore enabled it to live, whilst every competitor, under the same circumstances and conditions and with equally good machine power, was compelled to close. That form of wrong-doing, let us hope, is also a thing of the past. State after State has passed laws against such discriminations, and the railways themselves have learned that that form of iniquity kept from the coffers of the railway

companies their proper earnings, as effectually as it sowed the seed of discontent and produced the nettle of disaster to the communities which were subjected to the discrimination. The forms of discrimination which, in the seeking for business on the part of the railways, made it cheaper for the New York merchant to send salt or merchandise by boats to Boston, and thence to re-transport it to the West-Chicago or St. Paul-is also a thing of the past. The grosser forms of fraud by the treasury of railways, such as were incident to the history of Erie down to 1876, known as the Fiske-Gould period, cannot, I think, again be repeated. There is a stronger watchfulness on the part of the community and, in some respects, a higher sense of virtue on the part of the railway managers.

Indeed, it is not surprising that the railway management in this country should have fallen short of meeting the highest standard of morality demanded by the importance and the immense values of the properties, when we realize the rapidity with which this vast interest has grown. At the close of the Civil War, 30,000 miles of rail were in operation and, in 1895, 170,000 miles; at the close of the war, \$750,000,000, and in 1895, \$11,000,000,000 represented the total investment in the rail transportation industry. Where were the administrators to come from? We are in this respect placed in the position that the United States was in, at the outbreak of the Civil War, with reference to finding generals for its armies. The

patriotism and volume of the population supplied the army with men. The difficulty was how, effectively, to lead them. And disaster after disaster befell our arms because the men of the North were not so militant in their education as the men of the South, and because for several years, and until the war itself developed them, there were not enough competent leaders to handle the men effectively. Most railway presidents and chairmen of boards come from the ranks of other professions, or from branches of employment in the railway, the business of which is wholly foreign to the financial administration of the road. The capacity, industry, and knowledge required for the successful handling of the budgets of railway properties, which have a gross income ranging from \$12,000,-000 to \$40,000,000, are as great as that required for the balancing of the expenditures and receipts of a nation. The aggregate annual income of the railways of the United States is close upon \$1,250,-000,000; operating expenses vary from 64 to 80 per cent. of the income; and upon the relative proportion of one to the other of these factors success or failure depends. That proportion is determined mainly by business and physical conditions, but also, to a considerable degree, by the capacity of the railway managers. Of the \$1,250,000,000, only between \$250,000,000 and \$350,000,000 are annually available for the payment of interest on bonds and dividends on stock. Whether the net earnings will suffice to meet the fixed charges, not

to speak of dividends upon stock, is largely dependent (assuming honesty, of course, as a primary requisite) upon a profound knowledge of the internal administration of the railway, and the development of its earning power; and also, to a great degree, upon a prevision, akin to genius, of the condition of markets and crops, and of the general financial situation.

But where are all these gifted railway financiers to come from-full-grown, Minerva-like,-competent to administer the 175,000 miles of rail of the United States, and effectively and economically to handle the 800,000 men directly employed, and the 3,000,000 of people indirectly employed by the transportation companies of these United States? Independently of the almost impossible task of finding, in sufficient quantity, the extraordinary capacities for the proper financial management of so vast and so rapid an industrial growth as the railway interest, there are certain obvious and radical defects of organization of railways which expose them to special danger, and which cause railway enterprises to founder in very slight financial storms, through which other and smaller industrial enterprises float with safety, such as the fact that there is usually no reserve working-capital.

The practical result, to which I desire to draw attention and to which my experience and study have led me, is that we are diverted from any true and useful purpose in listening to the suggestions of ultimate ownership of the railways by the State;

that the example of other countries which commenced to acquire, or, in the early history of their development, acquired such ownership, is of no avail to us, because we are called upon to deal with a thing too vast for governmental control, and particularly too vast for the control of a government like that of the United States, with no permanent bureaucracy, and with the whole scheme of government antagonistic to the ownership ordirect exploitation of any such enterprise. State commissions have done some good, but on the whole they have created some mischief of their own, and any further development in that direction, except that of mere supervision and some perpetual system of inquiry into the administration of the railway so as to insure publicity, is of little permanent value. The true development of governmental control lies in the direction of strengthening the Interstate Commerce Commission as a tribunal, and giving to it greater freedom of action to relieve the railways from the burdensome restraints against pooling, and to relax somewhat the rigidity of the rule of the long and short haul clause. We must be just to the commercial necessities of the community, but we must also put under foot the effort to use those commercial necessities for personal and local ends, and with the view of creating a discrimination for the benefit of A at the expense of B. We must never forget, in dealing with the railway interest, that its prosperity is important, not only because it is by far

the largest bag in which the past earnings and savings of our whole community are invested but also because its further development is dependent upon such prosperity. Immense as has been the progress and general advancement of the great railway net of the United States—perhaps a little ahead of the wants of the period—there are still many parts of our country unsupplied with this. instrumentality of commerce. We must leave it sufficient vitality and earning power to induce further and continuous investment in railway enterprises, and we must keep them open as a field for the investment of the surplus earnings, not only of the people of this country but of those of other nations. A want of confidence has been engendered in the minds of the investor both at home and abroad, in this class of investment, from two causes: one is the apprehension of demagogic legislation in the United States and the other is the fear (and this is still more potent) of the wrecking of the railway by dishonest and incompetent man-Conservative and wise legislation will, on the one hand, reinstate the confidence of the investor, whilst, on the other, a guard will be placed against the dishonest and reckless manager by strengthening instead of weakening the Interstate Commerce tribunal, by the publicity of all railway accounts, and by the insistence upon an independent official audit of such accounts through officially responsible and independent accountants.



APPENDIX

A NEW LEGAL MAXIM—DE MAXIMIS NON CURAT LEXI

[The Editor has thought it desirable to include with the preceding Essays which are directly concerned with the questions of Railway Management, a paper brought into print by Mr. Sterne in November, 1888, which has to do with the general matter of the relations of corporations with their shareholders and with the community. There is hardly a word in this utterance of twenty-three years back which is not pertinent to many conditions that are to-day troubling the community and that are calling for action on the part of the voters, the legislators, and the courts.]

THE time has probably arrived when the results obtained in the courts of the United States during the past thirty years may be crystallized in a new legal maxim, and I suggest as such a maxim, de maximis non curat lex. With the time-worn maxim "de minimis non curat lex" we are all familiar.

Is it not the experience of every practising lawyer that when he is brought into contact with one of the great combinations of capital and its doings, when he sees the reckless manner in which it deals with the stockholding interest, the artifices connected with its administration, and the misrepresentations and positive frauds in relation to such administration, coupled with the entire immunity from responsibility ac-

¹ The Railway and Corporation Law Journal, New York, November 17, 1888.

companying the building up of huge fortunes by manipulation of values and their representatives by unscrupulous but extraordinarily intellectually gifted individuals, that the weapons of the law break down when directed against or brought into conflict with these novel devices of capital to escape legal responsibility, which absorb, without rendering a compensating service, a vast proportion of other people's goods? Take as an example the manner in which the guaranty of the Manhattan Elevated Railroad Company to pay eight per cent. on the stock of the Metropolitan Elevated Railroad was defiantly broken, and this breach maintained. Every individual purchased his stock in the expectation that his own consent would be necessary to reduce his income below the stipulated amount of the contract. But the courts have held that two boards of directors, however constituted, may go through the form of revoking an agreement made for the benefit of third parties and not for the benefit of the board of directors originally, although such revocation of the agreement may incidentally benefit the members of the boards of directors voting upon the subject. The courts have refused to go behind the returns made by such boards of directors. The decisions which have upheld the absorption of rival lines by the Western Union Telegraph Co. in defiance of limitations on corporate authority and in defiance of the general laws of the State; the facilities which have been afforded to street, steam, and cable railway companies, in disregard of constitutional limitations, to lay tracks and confiscate private easements. are illustrations to the same end.

Is it not true that a stock manipulator and manu-

facturer of the United States may put out issues of securities of all kinds by artfully contrived representations publicly made through others (so long as he has securities for sale) of expectations of continued earnings, which illusory earnings are mere bookkeeping to induce investments, and after the investments are made, take the very opposite position, showing that the earnings that had theretofore been represented to have been made were illusory and had not been earned, that rival lines made the earnings of the same amount impossible, and that the stocks and bonds were issued upon expectations that have proved false, and were substantially over-issues as compared with the amount that can be realized out of the property, and then he himself become the largest purchaser at the low prices, after having sold at the highest, and reorganize companies thus wrecked, upon a new basis of interest-bearing securities lower than those which had been issued by himself and his coadjutors a few years before, making money by inflation, making money by ruining the inflated property, and again making money under reorganization, all engineered and manipulated by himself under the cover and by means of the law.

That so monstrous a transaction, yielding enormous sums of money to its projectors and resulting in disastrous losses to the investors, can succeed, and yet that the law is powerless to attach thereto a well-defined legal responsibility by way of restitution, must arise from the fact that the courts are acting upon the maxim of de maximis non curat lex, without knowing it.

The very magnitude of the transactions makes the

individual as weak and powerless against the perpetrators as he is against the government. He can not assert his rights without spending a sum larger, for the purpose of securing them, than that of which he has been deprived. When he does get a hearing his case comes under one of the exceptions to the general principles of law or equity on which he relies, and which, therefore, ceases to make the case at bar applicable to such a manipulating king, and he finally abandons his case disheartened, or gets a decision against him in the court of last resort on a question of practice; or, if the courts grapple with the question on its merits, they find themselves lost and amazed by the financial difficulties, and fail to apply to so intricate and complex a situation the plain principles of law or equity; so that we have an illustration that when a fraud or wrong takes on colossal proportions, in figures which make them analogous to those seen in the budgets of government, the litigant has no remedyde maximis non curat lex.

There are two reasons why the law has no remedy in these cases:—

Ist. The intelligence of our law administrators is not equal to the intelligence of our leading bankers and railway magnates. This is a situation which came about by the intensity of occupations and the struggle for commercial supremacy in the nineteenth century. The industrial development of this age has been far beyond the juridical development. The law has made in recent years no such progress as has been made by every useful art and science. The consequence is that the applied arts and sciences have invited into their fields the strongest and best intellects

of the community, and they are better equipped than the law administrators in ingenuity and intellectual Nimbleness of mind is more readily met alertness. with in the bankers' and railway presidents' rooms than on the appellate benches of the courts of our land. There is learning on the one hand, and a preternaturally developed instinct of gain and the seizing of opportunity on the other. The slower footed animal, therefore, cannot overtake the fleeter organism. Before the nineteenth century, the government and the law had absorbed the strongest intellects of the community. The nineteenth century widened the field of activity for intellect and offered greater attractions and greater profitable results in directions other than the law or government. Hence the new maxim. de maximis non curat lex, although never before formulated, indicates that the men for whose benefit this maxim is practically applied are intellectually stronger than the lawmakers and law administrators, and evade the spirit of the law whilst conforming to its letter. Whatever of strength there is in the law is retained by the stronger interest to be turned against the rest of the community. The law becomes itself thereby an element of oppression, instead of the benevolent mother of Justice.

2d. The law in the machinery of formation has not kept pace with the general development of the community. Our lawmaking is still in the colonial period. There is no division of public from local law. No notice is given of local laws to those interested in their passage or rejection, and at the end of each year acts are either purchased or smuggled through the legislative bodies affecting private interests without

any knowledge on the part of the many affected thereby, and unfortunately without any responsibility being attached to such loose and slipshod legislation to the political party in power.

The conditions of lawmaking which prevail both in Congress and in the several States were well enough for a sparsely settled community of planters and farmers, but are utterly and ridiculously inadequate as bulwarks against the pressure from those who are selfishly and personally interested in profitable legislation for themselves as against the community. The greater part of the legislation of every session is, in one form or another, and frequently under the guise of general laws, mere sinister and personal legislation. Neither in the Federal Government nor in the several States has any scheme been adopted to weigh, scrutinize, and winnow private legislation, or to attach responsibility for the public laws which are enacted during a legislative session.

In every State in the Union, therefore, the maxim of de maximis non curat lex is applied not only to the exclusion of meritorious litigants seeking redress against the long pen and bulky ledger of the great stock and bond manipulators, but these same captains of finance and of industry, the very men who have immunity from the law from its punitory and repressive side, have at the same time the machinery of law-making in their own hands, shaped to their own ends by their own ingenuity and by the neglect of the commonwealth to perfect its lawmaking machinery.

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